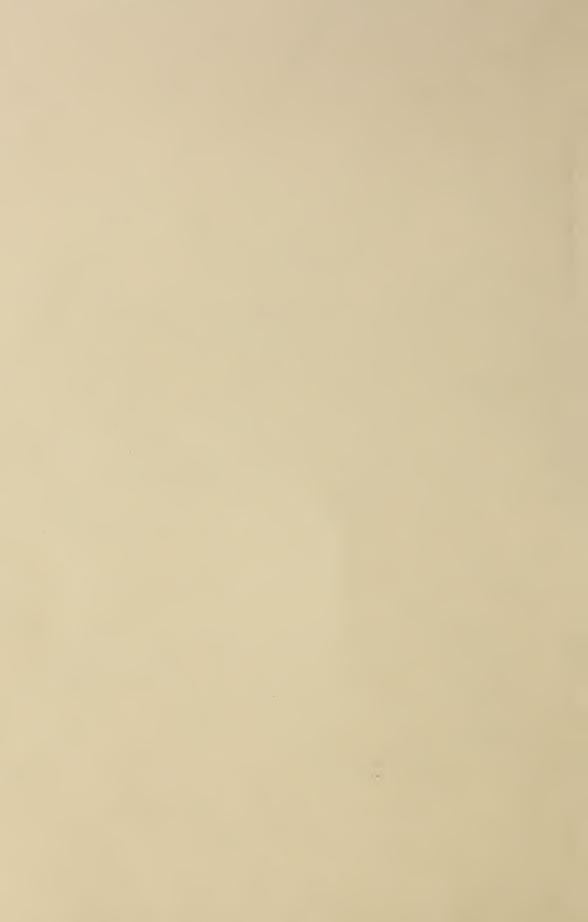
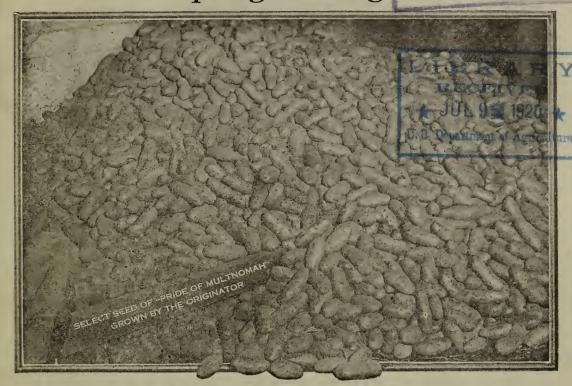
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Do not assume content reflects current scientific knowledge, policies, or practices.



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# ARTHUR CANN Spring Catalog



## SEED POTATOES

It is not enough to know that seeds grow, for weed seeds will grow. The vital point is, what will they produce? This is a matter that should be given strong consideration and which the average buyer, sometimes too intent on price—overlooks. Progressive gardeners and farmers realize that blood will tell in seeds as well as in animals. Realizing that their success depends upon the seeds planted—they avoid "cheap" seeds as being poor economy. For the benefit of our customers and for those who have never dealt with us, we claim to be producers and distributors of the best seeds possible to secure. Eighteen years' experience have given us a seed knowledge that is now at your service. We know that planters of seeds buy them entirely on confidence and to lose a man's confidence is to lose his patronage. We sell seeds to the most critical seed buyers there are and continued dealings with them have proven that our seeds grow, produce and give satisfaction.

## OUR REPUTATION IS BEHIND OUR SEEDS.

They signify the very highest standard of excellence. To the planter, nothing is more important than quality and fertility in the seed they use—and in this connection it may be of interest to know that the seed tests carried out by the United States Department of Agriculture found that California-grown seeds possessed more vitality and stronger constitutional qualities than seeds produced in colder regions. For these reasons, California furnishes the bulk of vegetable seed used in the United States.

I am a seed specialist-trained by years of experience in growing and distributing seeds that grow—and on their merits and the merits of a square fair basis, I solicit your orders.

Sincerely Yours,

First and San Antonio Sts. SAN JOSE, CAL.

# How to Order by Mail

Your Name and Address—Be very sure that your name and address are written very plainly on each order. We frequently have orders where neither name is given or address omitted. Also give plainly the R. F. D. number and box, or the street address.

Cash With Order—The proper way is to send remittance in full to cover order and postage. We send order C. O. D. only if 25 per cent of the amount of order is enclosed. Plants we never send out C. O. D.

Remittances should be made by Postoffice Money Order, Express Money Order, or by Bank Draft on San Francisco. For amounts up to one dollar, clean, unused postage stamps will be accepted. Coin should not be sent by mail. Checks on local banks may be sent which will be a great convenience to many customers. We do not accept responsibility for orders which never reach us.

Shipping—We will use our best judgment as to the best way of sending orders when specific directions are not given. On large "postpaid" orders it is better to have them go by express if your town is on a railroad—it is safer. We prepay express charges quoted "postpaid." If special directions in shipping are needed, send them explicitly, and where express or freight office is different from postoffice, so state in space on our order sheet. Seeds do not pack well with nursery stock, because they are liable to get damp and become spoiled; it is better to have them shipped separately.

Seeds By Mall—We send by mail or by express prepaid, all orders for flower seeds, and for vegetable seeds (except beans, corn and peas). We do not pay postage or express charges on onion sets, field seeds, clovers, grasses, bird seeds, beans, corn, peas, tools or plants; but we do pay them on other vegetable and flower seeds.

Parcel Post—A new and adequate Parcel Post law now applies to shipments of seeds, bulbs, tools, plants and garden supplies (except poisons and liquids) to all parts of the United States; also to Alaska, Canal Zone, Guam, Hawaii, Porto Rico and the Philippines. Packages are subject to a limit of maximum weight in the first and second zones of 50 lbs., and in all other zones, third to eight, of 20 lbs. The maximum size of a package is 84 inches for combined length and largest girth.

Zone Rates may be had by application to your postmaster, who will tell you the zone which you are in with reference to San Francisco, or we will tell you as nearly as we can if you write us.

| DOMESTIC PARCEL POST RATES  On Seeds, Plants, Bulbs, Roots, Books, Tools, etc., within the U. S. and Possessions. | First pound<br>or fraction | Each additional pound or fraction |
|---|----------------------------|-----------------------------------|
| First ZoneSan Jose and within 50 miles  | 5c                         | 1c                                |
| Second Zonewithin 50 to 150 miles   | 5c                         | 1c                                |
| Third Zonewithin 150 to 250 miles   | 6c                         | 2c                                |
| Fourth Zonewithin 300 to 600 miles  | 7c                         | 4c                                |
| Fifth Zonewithin 600 to 1000 miles  | 8c                         | 6c                                |
| Sixth Zonewithin 1000 to 1400 miles   | 8c                         | 8c                                |
| Seventh Zonewithin 1400 to 1800 miles   | 11c                        | 10c                               |
| Eighth ZoneAll over 1800 miles  | <b>12</b> c                | 12c                               |

## ABOUT GUARANTEEING SEEDS.

While we produce and sell the best seeds possible to secure, we do not warrant in any way, the contents, description, quality, productiveness or any other matter of any seeds, bulbs or plants sold by us and we will not be responsible in any way for the crop. If the purchaser does not accept these goods on the above terms, they must be returned at once and the money will be refunded.

## Seed Potatoes

The California grower demands a clean, true to name uniform type of seed—free from disease and of strong vitality, varieties adapted to the different soils and climatic conditions of the potato growing sections of our State.

Good Clean Seed—carefully selected as to type, shape and size is sent them and planted on new land or where there has been a rotation of crops.

These fields are scientifically cultivated and special care taken to prevent mixtures. The results of their care and attention is shown when in a field of one hundred acres in this State from their seed the percentage of mixture reported by the State Horticultural Commission, when tests where made for certification was less than one-fourth of 1%, and large plantings of American Wonder and Burbank potatoes from stock furnished by them successfully passed inspection for certification last season. Many of their varieties are well-known to California growers, who have tested them out with splendid results.

## IMPROVING THE YIELD AND QUALITY

Potatoes are of such great economic importance as a food, giving quick, sure cash returns and are so valuable in crop rotations that our experience as growers and the methods and recommendations of high authorities, which we have quoted, may be of interest and helpful to others at this critical time when there is a general awakening to the necessity for better cultural methods, standardization of crops and above all a systematic selection of seed.

Unfavorable growing conditions in many sections and the urgent necessity for food conservation have shown that some action must be taken to improve the quality and increase the average yield.

The general practice throughout the country of selling the choice potatoes and planting the culls, no organized effort to combat potato diseases and the destructive insects, poor cultural methods and the practice of marketing through brokers, who for example buy indiscriminately all elongated white potatoes as Burbanks or Wonders as the case demands, has resulted in untold loss and confusion which, however, is being corrected by Growers' Associations and by the well-directed efforts of extension service men and we can hope for a wonderful increase in yield and value of the crop under improved methods of growing and standardizing varieties.

So much excellent literature on the potato, including the splendid new booklets of our State institutions, giving special information for various sections are now ready for distribution or in the hands of growers, that we will confine ourselves briefly to our own problems, the most harmful and prevalent diseases and pests—and descriptions of the varieties of potatoes that are in general cultivation on the Pacific Coast and have proven best for our markets and growers.

No radical departure in methods of growing has been used but the success of our efforts, covering a period of about fifteen years, demonstrates the value and advantages of persistent, systematic work.

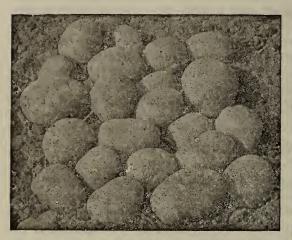
Special detailed information will always be cheerfully furnished on request and if we can interest or help you in any way to improve the standard and yield of your crop, this little booklet will have served its purpose.

## Seed Potatoes

The following descriptions have been carefully written from our own experience, with the addition of notes on origin of varieties from Bulletins of the U. S. Dept. of Agriculture.

The illustrations are from our own photographs of average types as produced by our growers in the North.

## **EARLY VARIETIES**



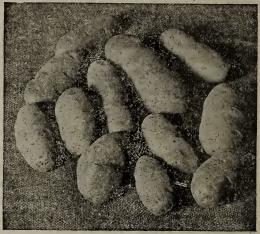
"Earliest of All"

## Earliest of All:-

Originally a selection from Early Eureka introduced by Portland Seed Co., 1908, showing a marked difference in habit and greatly increased yield which years of careful re-selection have firmly fixed and improved. Earliest of All is a shallow eyed, white skinned variety of vigorous growth, not subject to blight or disease and does not make a second growth. Not affected by summer drouths owing to its quick growth and early maturity. Keeps as well as any late potato. Has shown up exceptionally well in California this past season and is the earliest of all early potatoes. 6c per lb.; \$5.00 per 100 lbs.

Early Rose:—Originated by Albert Bresee, Hubbardton, Vt., in 1861; claimed to be a seedling of Garnet Chili. Introduced to the public by B. K. Bliss & Sons, 1868.

An early maturing pink variety producing strong, vigorous vines of medium height. Flowers white, rather abundant. Tubers quite smooth, elongated or oblong, stem and seed end rather blunt. Eyes shallow, but sharp and strongly marked; skin thin but tough. Flesh creamy white sometimes streaked with red, solid and brittle, rarely hollow. Our strain of this grand "old timer" is exceptionally good. 4c per lb.; \$3.50 per 100 lbs.



Early White Prizetaker

## Early White Prizetaker:-

One of the finest of the early sorts, oblong in shape, 4 or 5 inches in length. Skin smooth and white with few eyes. Is of superior cooking quality, baked or boiled, cooking up dry and floury. White Prizetaker has important advantages over other early potatoes as its white skin, large size and good keeping qualities make it an ideal main crop variety that sells at the best price. 4c per lb.; \$3.50 per 100 lbs.

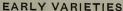


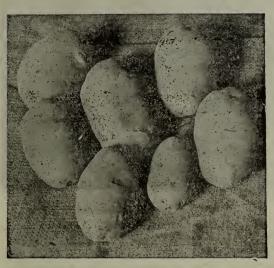
Early Rose

#### CHOOSING THE BEST VARIETY

In choosing a variety of potatoes consider your soil conditions, market requirements, climate and seasons, and history of available seed stock. There is no one best potato but there are many excellent sorts some of which will prove more profitable and sastisfactory for your purpose than others.

We have much valuable data that will be helpful to you in your selection that is free on request.





Scotch Rose

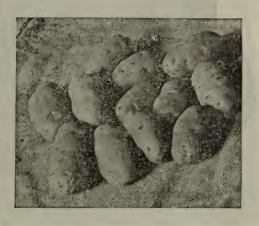
#### Scotch Rose:-

Reported to be a seedling of Early Rose, developed by the Guelph-Ontario station, and considered to be superior to the parent stock through sections of New York and the New England states where it has been tried. Color a little deeper than Early Rose. The tubers average larger and of flattened oval to oblong type; of superior cooking quality, cooking up light, white and floury. A hardy heavy yielding dependable variety that we believe to be superior in every way to Early Rose. 4c per lb.; \$3.50 per 100 lbs.

Early Ohio: - Originated by Alfred Reese in

1871; claimed to be a seedling of Early Rose. Introduced by Gregory in 1875.

One of the best early pink potatoes, similar to Early Rose. Tubers round, oblong shape. Eyes rather shallow but strong. A heavy yielding dependable variety. An old favorite that is still popular in many sections. 4c per lb.; \$3.50 per 100 lbs.



Early Sunrise

#### Early Sunrise: -

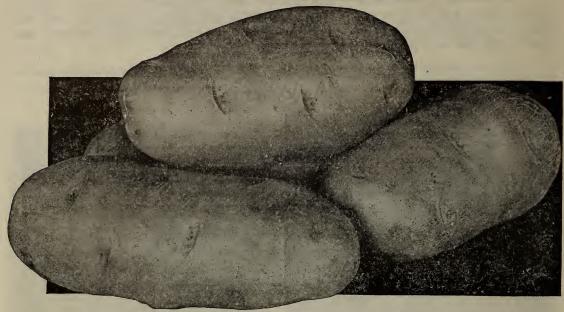
A hardy early pink variety which has always been free form blight and is the best yielder of its type. Cooks dry and mealy. One of our earliest and best pink skinned potatoes. 4c per lb.; \$3.50 per 100 lbs.

#### Early Freeman

A vigorous productive early potato producing uniform tubers of oblong flattened shape usually blunt ends, russet skin, flesh fine grained white and floury, much earlier and a far better yielder than many other early varieties. 4c per lb.; \$2.50 per 100 lbs.

You can grow potatoes under most average conditions of soil and care, but for the big yields of shapely tubers that pay big profits it requires soil adapted to potato growing, good seed stock properly planted, and plenty of cultivating at the right time. You can make your soil fit by proper rotation and use of necessary fertilizers.

# Main Crop and Late Varieties



Pride of Multnomah:-

Pride of Multnomah

Introduced in 1909 by the Portland Seed Company. Tubers are uniform in size of the ideal elongated type with smooth thin white skin; eyes shallow; flesh snow white of finest table quality; flowers white; vines medium large of bushy growth; withstands drought well and is blight and disease resistant to a remarkable degree.

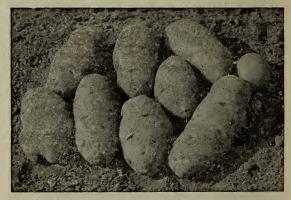
Pride of Multnomah is the leader in its class, being superior in yield, uniformity and table quality—holding the record yield for the state of Calfornia from our Oregon grown seed—700 bushels of clean uniform stock, the prize acre at P. P. E., San Francisco, 1915, grown by Boa Vista Ranch, Pla cerville. 5c per lb.; \$4.00 per 100 lbs.

Burbank—Low Top:—Originated by Luther Burbank, 1873; claimed to be a seedling of Early Rose. Introduced by J. J. H. Gregory in 1876.

A standard commercial variety. Late and very productive. Skinn nearly smooth. Eyes rather shallow. Tubers long and slightly flattened. Under proper selection it thrives equally as well now as at any time since its introduction. A fine bred-up, heavy yielding strain. 4c per lb.; \$3.50 per 100 lbs.

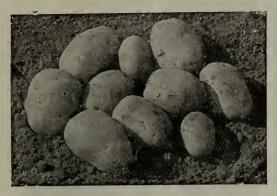
American Wonder:—Originated by L. Wall; Seedling of Wall's Orange. Introduced by James Vick in 1892.

One of the earliest and best main crop varieties. Strong grower of branching habit and great producer. Tubers white, large and uniform in size; elongated and slightly compressed. Few eyes and nearly flush with the surface. Blooms white; foliage rich dark green. 4c per lb.; \$3.50 per 100 lbs.



American Wonder

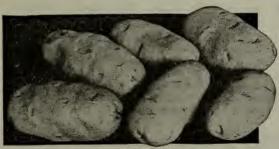
The cuts used in this catalog are photographs of Hyde's selected seed stock, sold by us.



British Queen

British Queen:—Introduced in U. S. from England.

Very prolific early white-skinned variety, round or oval in shape. Is of fine table quality, cooking dry and mealy. Has made a splendid record in the Sebastopol district of California—is disease resistant, hardy and vigorous, has a purple flower and is very similar to the purple flowered "White Rose" that is so popular in southern part of the state. 4c per lb.; \$3.50 per 100 lbs.



Netted Gem

Netted Gem:—California Russett, Russett Burbank, Yakima Gem, Idaho Russet, etc. Origin not known.

A splendid main crop late potato that gives good results in dry sections. Tubers are elongated, medium sized with russet netted skin; flesh white; eyes are flush with surface; good keeper and produces a fine yield. This is the variety grown extensively by irrigation in Washington and Idaho for baking. Our stock is extra choice of the most improved type. 4c per lb.; \$3.50 per 100 lbs.

White Rose: - California.

A standard market potato in southern California, the shape being a flattened oval rather elongated, having few eyes and a beautiful creamy white skin. Abundant foliage and lavender flower—fading to light. As an exhibition variety White Rose has won many honors, being awarded a gold medal at P. P. E. San Francisco—the stock we grow is from this same strain.

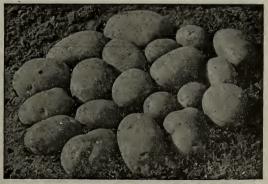
Yields well, and although not an early maturing potato, it makes a vigorous rapid growth and can be used quite early. 4c per lb.; \$3.50 per 100 lbs.



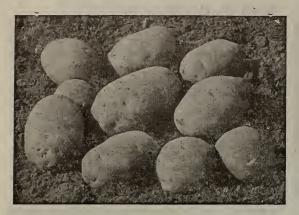
White Rose-California

Producer:—A seedling of the Portland Seed Co.

A large, smooth, oval, white potato with shallow eyes, of finest table quality, does not boil to pieces and has no superior baked. Is a hardy, vigorous grower, producing enormous yields and is especially valuable for dry or light soil, and has shown up better in California trials than any other new variety. Sample hills dug on overflowed river sediment averaged 4 lb. 3 oz.—416 sacks of 120 lbs. each to the acre—without irrigation. 5c per lb.; \$4.00 per 100 lbs.



Producer



"Snow"

Snow:—Originated by W. E. Johnson, Richmond, Me.

A splendid early maturing main crop potato that gives a good yield on poor or light soil. Vines are luxuriant and dark green with heavy foliage, stems light green, flowers white, freely produced. Tubers large, oblong and slightly flattened, generally with blunt ends, base usually more or less notched. Skin creamy white more or less netted, flesh fine grained, flaky and of excellent quality; eyes shallow. Potatoes grow close together with few small ones. The seed put out last year was a delight to early planters. One patch cut down by frost three times "came back" and produced a good crop. 5c per lb.; \$4.00 per 100 lbs.

### Garnet Chile

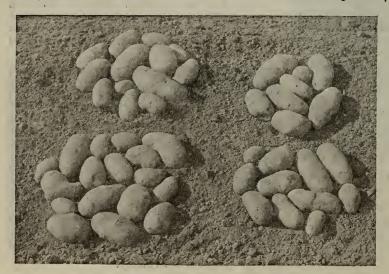
Garnet Chili:—Originated by C. E. Goodrich, Utica, N. Y., 1853; claimed to be a seedling of Rough Purple Chili. Introduced by Goodrich, 1857.

A heavy yielding medium size late potato of roundish irregular form; deep eyes, blunt ends, skin red, flesh moderately white, vines and leaves light green. Its growth is so vigorous and rapid that the young tubers form very early and stand handling and shipping better than other early varieties, hence its value to California growers for early shipping to distant markets. 4c per lb.; \$3.50 per 100 lbs.



White Star

Claimed to be a seedling of Excelsior crossed by White Peachblow. Medium early heavy producing variety of exceptionally strong, vigorous growth. Foliage dark green. Tubers oblong and large. Skin white with a minute russet netting. Flesh white. Adapted to strong bottom slough or foot hill land. Our selected strain is from the Pajaro Valley stock built up. 4c per lb.; \$3.50 per 100 lbs.



# Growing Potatoes

Preparation of the Soil—Circular No. 161, "Potatoes in California" by Professor Gilmore of the University of California, gives briefly such sound advice on this subjert that we quote his recommendations as follows: They will apply in general to any potato growing district.

"PREPARATION—The importance of early and thorough preparation cannot be over emphasized. It is estimated that this procedure gives half the assurance of the crop. The land should be plowed as deeply as possible in the fall and allowed to remain rough during the winter, in order that it may be benefitted by the winter rains and weather. As early in the spring as possible it should be worked with disc and harrow as often as may be, in order to keep the surface in good condition and to destroy early germinating weeds. It is desirable that the interval between opening the furrows before planting and closing them afterward shall be as short as possible. In case the land cannot be plowed until spring it should be plowed deeply and worked frequently, in order to give it sufficient compactness to facilitate the distribution and retention of mosture."

The great advantage of thorough preparation of the seed bed before planting should never be overlooked as much can be done at this time to insure the crop against later adverse conditions. Care should be taken not to work the soil when too wet as this may result in a serious failure and may require a long time to get the ground in good condition again.

Selection of Seed—The time and trouble necessary to get results from hill selection is comparatively small and insures large returns in increased yield and improved quality, better prices, more resistance to diseases and pests by increasing the vigor of the stock. The practice of selection is not urged for the production of new strains but very quick results are secured by the isolation of the established heavy yielding more uniform typse that occur in seed stock of good average quality. The average yield from stock that has not been re-selected is held low by the inferior and weak strains. Their elimination gives good returns and amply repays for the extra labor. This elimination and selection can be carried on as far as the results justify.

Two potatoes of equal appearance selected from the bin or pile may not produce the same general results, for the reason that the tendency is to reproduce the characteristics of the hill instead of the individual tuber, hence the selection of one good potato from an otherwise poor hill will not give the results that a potato of the same general appearance from a good heavy yielding hill. Small potatoes as a rule come from poor hills, and if planted will tend to produce small ppotatoes and poor hills. Careful selection should be continued from year to year to improve and maintain the standard as there is always a possibility that the good yielding strains will at times produce poor hills that can readily be thrown out if looked for but that otherwise will rapidly cut down the yield and grade.

Quoting Cornell University—the results from tests of poor yielding strains of the same variety against the high yielding selections for five years—3 varieties—gives an average of 82 bushels per acre for the low yielding strains and 208 bushels for the high yielding strains.

Selections for type, color, shallow or deep eye, shape and like physical characteristics are transmitted as demonstrated in the example of the American Wonder illustrated herewith. One grower for several consecutive seasons selecting the shortened, rounded types, the other in a different section of the country having selected for the standard type of this well known variety. The hills illustrated show a general and marked uniformity to the types selected and would not be readily recognized as strains of the same potato.

Soil Requirements and Treatment—Good Potato soils—those that produce big yields of shapely tubers, having good table and keeping qualities—may be of several different types.

Clay loam, sandy or gravelly loam, silt, wet land and soils heavy in organic matter have all produced excellent potatoes. But only where the drainage is good and the soil well aerated and properly worked can best results be obtained. Given a soil of average

## Growing Potatoes--continued

fertility drainage is of the utmost importance, next in order being the organic content in the form of humus to retain the moisture and in the case of heavy soils to improve their mechanical condition after proper drainage has been secured. A soil rich in organic matter not only conserves the necessary moisture for the growing crop but is less susceptible to the extreme changes of atmospheric temperatures that are often so unfavorable to growth and development.

Soil and Diseases—It is generally recognized that certain soil types are unfavorable to certain of our common potato diseases and where it is possible to do so, advantage should be taken of this knowledge and extreme care used to prevent the introduction of certain diseases to soil conditions that are favorable to their development.

Rhizoctonia and Black Leg, as example, develop more freely and cause more loss on heavy soils. Scab is more prevalent in soils having an alkaline re-action.

Rhizoctonia is favored by an acid or neutral soil, therefore the alkalinity or acidity of the soil influencing certain diseases can become a factor in their control. The use of lime, producing an alkaline re-action may increase the amount of Scab, while the plowing under of a soiling crop will increase the acidity of the soil and lessens Scab but makes conditions more favorable for the development of Rhizoctonia.

Barnyard manure, bone meal, wood ashes and some of the forms of potash salts are all conducive to Scab and if used should be applied the Season or Fall previous to planting.

Seed Treatment—Dipping either in a solution of Formaldehyde or one of Bi-Chloride of Mercury (Corrosive Sublimate) are the two methods generally recommended for treating seed potatoes, as follows:

Formaldehyde, 40% Commercial Solution \_\_\_\_\_\_1 pint Water \_\_\_\_\_\_30 gallons

Soak the potatoes in this solution for two hours and spread out to dry. This treatment is effective against Scab but as it is not to be depended upon for Rhizoctonia, the Bi-chloride of Mercury solution is always recommended as it will do all that the Formal-dehyde accomplishes and takes care of our most troublesome disease, Rhizoctonia. The Bi-chloride of Mercury solution is prepared as follows:

SPECIAL NOTE—In dissolving the corrosive sublimate use a small amount of hot water, about a gallon to the ounce, adding it to the cold water when it is dissolved as it will be impossible to get good results by attempting to mix the entire amount in cold water.

WARNING—The poisonous nature and corrosive action of this solution makes it necessary to use care in handling and to keep the treated potatoes from stock or poultry. Any that are not used should be burned or buried. Make the solution in a wooden or porcelain container as it will corrode metals and rapidly lose its strength.

Both of these solutions will lose strength through use or standing for any length of time and should be made up fresh and not more than four lots of potatoes dipped without renewing the solution. The dipping can be done in bags but the potatoes should then be spread out to dry, care being taken not to re-infect them by using the same bags or containers or spreading them where they would again be in contact with untreated stock.

Greening—After dipping the seed should go through the process of greening, leaving them spread in the light and warmth when the light will cause them to assume a greenish color and sprouting will begin. Sprouts brought on in this way will be short and thick and the potato will awaken from its dormant condition and develop much more vigor and vitality than potatoes that are not so treated. The greening also is a big factor in eliminating fungus growth and diseases. Another very valuable result from greening is the time gained as the potatoes thus treated will germinate and develop very much earlier than they would otherwise.

## Growing Potatoes--continued

REMEMBER that small potatoes sorted from the average crop will contain many degenerate seed and may prove very unprofitable for planting.

But small seed that have not attained their normal size on account of late planting—frost killing the vines, dry or unfavorable growing conditions, will often produce a splendid crop as it is a curious fact that immature seed produced under the above conditions or by mowing the vines just before they ripen and digging a few weeks later has given better yields than plantings from mature tubers.

Cutting the Seed Pieces—Experience has shown that the two ounce seed piece is the most satisfactory and prefitable to plant and each piece should contain at least two good eyes and should be cut in a square or blocky shape, rather than thin and long. Since the strongest buds are near the bud end of the tuber the seed sets should be cut in a manner to include one or two of these strong buds on each piece. Experience is the only guide to efficiency and the cutting of seed is very important as it has much to do with the stand. There are mechanical cutters on the market but these are not generally recommended and there is much waste from pieces that do not possess strong eyes.

To insure against rotting in the ground, should the season or planting conditions be unfavorable, dusting the cut potatoes with land plaster drys up and hardens the surface, insuring a better stand.

Other materials used for this purpose have not given the same satisfaction as land plaster.

Stem Versur Seed End—Comparison of the results in planting the basal (stem end) and the apical (seed end) of the tuber, quoting the Cornell University report of a five years' test of twenty-one (21) varieties.

"The average number of bushels per acre of petatees was 159.4 for the apical or seed end and 132.4 for the basal ends, a difference of 27 bushels per acre in favor of the seed ends. It was also found that the petatoes from the seed end averaged a little larger and were more uniform than those from the basal or stem end." While these results are interesting it is not always prefitable to apply them to large plantings.

Planting in California—Quoting again from Professor Gilmore, Circular 161,

"If the soil is rich and deep, well drained and well prepared, potatoes may be planted as close as 12 in. in the row with rows 20 in. apart, but under usual soil conditions in California it seems best to plant from 12 in. to 14 in. in the row with rows 36 in. to 42 in. apart. In this manner the crop may be cultivated by horse labor. The wider distance is essential under conditions where soil is poor and the moisture supply inadequate. The best depth under normal conditions is 4 in. to 5 in. If too deep the tubers will be small and of poor quality. If too shallow they will be of variable size, unshapely and often green by exposure to the light. In heavier soils the shallow depth may not be exceeded but in lighter soils the greater depth may be followed."

In the Coast regions of Southern California planting may begin in the early winter months, especially for crops that are designed for the early market. In most regions, however, planting may begin in early March and continue until June, the prospects for rich yields diminishing as the season advances. Second crop plantings are usually begun in late July or August. Early potatoes require from 70 to 90 days to mature a crop where the late varieties run from 130 to 150 days.

Culture—In deep, rich, well prepared scil, seasonably planted with well selected, properly cut stock, cultivation to conserve moisture and destroy weeds is all that need be done. It is good practice, however, to harrow lightly until the crop is well up as this keeps down the weeds and breaks the crust. conserving moisture. The first cultivation with the shovel plow can be deep and thorough. Thereafter two or three light cultivations not interfering with the root growth should be sufficient to insure the crop. Level cultivation is always recommended except under unusual conditions, high hilling or ridging only being practiced for the purpose of affording drainage under excessive moisture or where the crop is grown entirely by irrigation. Ridging is also sometimes necessary in combatting tuber moth.

No standard rules for planting, cultivating or handling the crop can be made as each season and in each section conditions may vary and must be met by the grower's judgment and experience.

## Growing Potatoes--continued

Irrigation—Under most conditions in California about 1¾ acre feet of water are necessary to produce a good yield but should be put on in three or four applications beginning when the plants are approaching full growth and repeating at intervals of 14 to 10 days until the vines begin to show signs of maturity. Light cultivation after each watering to break the crust in the furrow and conserve the water applied should be given. Flooding is not recommended, better results being obtained when the water is applied by furrows. In light soils furrows between each alternate pair of rows is sufficient, but a furrow between between every two rows is best. In irrigating the water should never be allowed to come directly in contact with the growing tubers and it is very important to remember that the potatoes will not thrive under a fluctuating water supply but every effort must be used to maintain a sufficient and constant moisture by proper irrigation and cultivation.

The following method is used with greatest success by a practical and experienced grower in the Imperial Valley—Mr. Mansfield.

Break the ground rough, plowing to a depth of at least eight inches at any season. About the end of December, flood and later when the ground is in fit condition, work lightly to keep the moisture. Just before planting, disc and "float". The float is an arrangement of planks 8 feet wide by about 30 feet long and is used for leveling and fining the soil. Plant about the last of January, using a ten-inch plow and dropping in every third furrow, then harrow until up to keep moisture. Irrigate again before blooming just in the bud stage, not too heavy, then cultivate the centers only.

By the above method Mr. Mansfield secures an even, regular growth as most of the moisture is put in the soil by the first irrigation and by proper handling carries the crop well along in a natural way. The working up of the ground rough in the beginning, aerates the soil and exposure to the sun does much to eliminate fungus disease.

## Vegetable Seeds

Each package contains the information necessary for the proper distance in planting. Do not overcrowd, but leave space for good cultivation and development. Firm the soil after planting—watch out for slugs and cut worms and keep the ground stirred up and well cultivated and the crops growing fast. Our garden seeds are noted for quick growth.

Jerusalem or Tuberous-Rooted Artichoke—Entirely distinct and grown exclusively for their large potato-like roots which are valuable for feeding hogs. Per Ib. 20c.

Golden Wax Beans—One of the most popular garden varieties in cultivation. Pods are long, nearly straight, broad and flat and golden yellow.

The seed is white, more or less covered with two shades of purplish-red. Pkt., 10c; per lb., 40c, postpaid.

Prolific Black Wax—An improvement on the old Black Wax or Butter Bean. Very vigorous and prolific; pods fairly long, golden yellow and very brittle and stringless; seed black. Pkt. 10c; lb. 40c, postppid.

Davis White Wax—The most hardy and productive wax podded variety. The pods are very long and yellow; and while not stringless it is a remarkably good bean for shipping; seed white, and on this account is desirable for a shell bean in winter. Pkt. 10c; lb. 35c.

## SELECTED STRINGLESS GREEN POD

We have made a selction of this favorite bean, which is absolutely stringless. Nor have any of its good qualities suffered. The pods are very tender and of the best qual-

ity—thick and meaty and long. The plant bears well and is a variety which will more than give satisfaction. Probably if there is one best bean in this class for the home garden it is Cann's Stringless Green Pod. Seed brown. Pkt. 10c; lb. 45c, postpaid.

Early Long Yellow Six Weeks—A long-podded green variety. Plants strong and vigorous and leaves large, of fair quality. Seed long, kidney-shaped, light-yellow with darker marks about the eyes. Pkt. 10c; lb. 40c, postpaid.

Extra Early Refugee—A very early, green-podded variety, with medium-sized, green, fleshy pods; seed drab, freely spotted with dark purple. The vines are smaller and of more upright growth, and leaves a little larger than the Late Refugee. Pkt. 10c; lb. 40c. postpaid.

Extra Early Red Valentine—A popular variety; erect vine with dark-green leaves. Pods of medium length; fleshy, round and saddle-backed, with only slight strings. Seed pink, marbled with red. Pkt. 10c; lb. 25c, postpaid.

Refugee or 1000 to 1—As many as 150 pods are found on one vine. These pods are long and green, becoming lighter in color as they mature. Not an extra early bean, but a hardy one and an extra heavy bearer. Pkt. 10c; lb. 45c, postpaid.

#### POLE AND RUNNING BEANS

Burger's Pole—A new pole variety of great merit. Bears long, brittle, stringless pods of excellent flavor. It rivals all other Pole Beans and is destined to become the most popular of all. Pkt. 10c; Ib. 40c, postpaid; or by express or freight, Ib. 30c.

Horticultural or Speckled Cranberry—An old favorite. Pods short, pale green, becoming splashed with brownish-red. Seed blush pink, spotted with red. Valuable either green or dry shelled. Pkt. 10c; lb. 30c, postpaid.

Kentucky Wonder, or Old Homestead—The most popular of the Pole varieties, and should be in every garden where beans are planted. It grows luxuriantly and bears for a long period. Pods are very long, very fleshy, and deeply creased or saddle-backed, green in color and stringless. Seed light brown. Pkt. 10c; Ib. 35c, postpaid.

Kentucky Wonder Wax—An excellent variety and one of the very best Pole Beans. The pods are long, very long, very thick, meaty, deeply saddle-backed, entirely stringless, and bright yellow in color. The vine is thrifty and very prolific. Seed deep brown. Pkt. 10c; lb. 40c, postpaid.

Scarlet Runner—The well-known and old-fashioned climber, having bright scarlet, pea-like flowers. It not only holds its place as a flower, but the pods, when young, are of fine quality for cooking. Seed large, bright scarlet, heavily blotched with purple. Pkt. 10c.

## LIMA BEANS-Bush Varieties

Burpee's Bush—The best late variety. Plant eighteen to twenty-four inches high; very prolific. Pods large, and the beans are also large and heavily ribbed. Will bear until stopped by frost. Pkt. 10c; lb. 40c, postpaid.

Fordhook Bush—This bean is of the type of Dreer's Bush Lima which it most nearly resembles. Its height is from twenty-two to twenty-four inches and it bears its beans in clusters of two to five, well out from the plant on long spikes. There are from three to five beans in each pod, with an average of four. The beans are round and thick, like those of Dreer's Bush, and have the same mild, delicious flavor. This delicious bean is far ahead of anything which anybody has known in Lima Beans up to the present time. Pkt. 10c; lb. 45c, postpaid.

## POLE VARIETIES

King of the Garden—One of the best and most popular main crop varieties. It is medium early and has very long pods, 51/8 to 61/2 inches long, which are well filled with four or five good-sized beans. The pods are very straight and handsome and the fine, hardy vines bear abundantly. Pkt. 10c; lb. 40c, postpaid.

### BEETS-TABLE VARIETIES

Early Eclipse—A fine, early table variety, top-shaped or tapering globe-shaped. Flesh deep crimson, zoned with pink. Crisp and sweet. Pkt. 5c; oz. 15c.

Extra Early Blood Turnip—A good variety for summer and autumn use. Its turnip-shaped with bright red flesh, showing zones. Pkt. 5c; oz. 15c.

Crosby's Egyptian—More globe-shaped than Extra Early Egyptian, and the best known and most popular variety; is very early and of fine quality. Bright red, with clean vermillion flesh. Pkt. 5c; oz. 15c.

Detroit Dark Red—One of the best table varieties, and the one we recommend for all garden purposes. Globe-shaped, bright, but rich, red flesh. Tops small and green. Pkt. 5c; oz. 15c.

Half Long Blood—A half-long variety, about eight inches long and tapering abruptly. Very rich, deep red flesh of fine quality. Pkt. 5c; oz. 15c.

Extra Early Egyptian—A turnip-shaped variety with dark red flesh showing zones of a lighter shade. Dark leaves; a good table variety and very early. Pkt. 5c; oz. 15c.

Long Smooth Dark Blood—A very desirable variety for light soils, where roots are easy to dig. Skin very dark brownish-red. Flesh deep blood-red. Pkt. 5c; oz. 15c.

Improved Blood Turnip—A turnip-shaped variety with deep red flesh. Tops green. A fine selected strain and one of the best varieties. Pkt. 5c; oz. 15c.

#### MANGEL WURZEL

Or Stock Feeding—For main crop, sow about March 1st in rows 22 inches apart, using about six pounds of seed per acre. To get good, large and uniform Beets, the plants should be thinned when in the fourth leaf to six inches apart in the row.

If large lots of seed are wanted, write us for special prices.

Champion Yellow Globe—A large, round, orange-yellow variety. Good for shallow soils. Pkt. 10c.

Golden Tankard Yellow-Fleshed—Very large, yellow-fleshed variety. Giant oval shape; small yellow-stemmed top. Pkt. 10c.

Mammoth Long Red—The largest of all the mangels and the heaviest cropper. Skin is red; flesh white, zoned with red. This variety produces a larger amount of good feed than any other beet, and is recommended as superior to all others. Pkt. 10c.

### SUGAR BEETS

Giant Half-Sugar for Stock-Feeding. Green Top.—A beet which is superior to mangels for stock-feeding purposes, as it is more nutritious, having a large amount of sugar. It is oval in shape and grows partly out of ground. It is of large size and yields enormous crops. Pkt. 10c.

#### SWISS CHARD-Or Kale Beet

Sometimes Called Spinach Beet—Used for greens by cutting stem and leaf, which are also very ornamental. It resembles an ornamental beet top, but has no edible root. It is a plant which is becoming very popular and should be in every garden. Pkt. 5c; oz. 15c.

#### **BROCCOLI**

Should be treated the same as Cauliflower, which it resembles. Plant and cultivate the same as Winter Cabbage or Kale.

Owing to the unusual conditions at this time, prices on seeds fluctuate so often we request our customers to WRITE FOR PRICES.

Early Large White—The best variety. Heads white and large. Pkt. 5c; oz. 40c. Purple Cape—Good large heads, which are tinged with purple. Pkt. 55c.

## BRUSSELS SPROUTS

The plants are very hardy and grow from two to three feet high, bearing a large mass of leaves at the top.

Improved Half Dwarf—The standard variety. Grows two or three feet high, and the stem is well covered with small, firm, round sprouts. Pkt. 5c; oz. 30c.

## EARLY AND LATE CABBAGE

It is difficult to give definite cultural directions for cabbage, since it is possible to have good cabbage at all seasons of the year in some parts of the country, and seed can be planted almost any time of the year. There are three good sesons for sowing the seed, however—in September for late winter and early spring Cabbages; in March for summer and fall cabbages, and in June and July for winter cabbages.

Early Drumhead-Second early; round, flat heads. Pkt. 5c; oz. 25c.

Large Early Wakefield (Charleston)—Is very similar to Early Jersey Wakefield, but nearly a third larger and a little later. Pkt. 5c; oz. 25c.

Early Jersey Wakefield—One of the best and most popular early varieties. Forms round, pointed heads of good size. Is very hardy and on account of its thick outside leaves is able to resist cold and other unfavorable conditions to a great extent. Pkt. 5c; oz. 25c.

Early Winnigstadt—A decidedly pointed head of good size and fine quality—the most sharply pointed of all cabbages. One of the hardiest varieties; resists cold, wet and insect pests to a degree which makes it very desirable; we recommend it as one of the best early varieties. Pkt. 5c; oz. 25c.

Selected Early Flat Dutch—A very superior strain of this variety. An early hard-heading cabbage of bright turquoise green. Pkt. 5c; oz. 35c.

Perfection Drumhead Savoy—A variety that is much prized in Europe and also by those who are familiar with it in this country. It is very sweet and crisp, and always tender. Heads medium sized and fairly compact. Pkt. 5c; oz. 25c.

## CHOICEST VARIETIES OF CARROTS

Danvers' Half-Long—The best variety for general purposes and the most largely used, not only for stock raising, but for table use as well. The perfect type is about eight inches long and about two and a half inches wide at the shoulder, tapering to a sort of half-point at the bottom. Color is a bright orange-scarlet. It is a very heavy cropper. Pkt. 5c; oz. 25c.

Improved Short White—The most popular of all white varieties, being a heavy cropper, and of a desirable shape to allow easy digging in heavy soils. The true type is very thick in the middle and should not taper abruptly from the shoulder. Pkt. 5c; oz. 10c.

Improved Long Orange—The best long carrot in cultivation. Can be used for both table and as a stock carrot. Pkt. 5c; oz. 25c.

Large White Belgian—The best known and one of the oldest white varieties—is a long-pointed root, and should only be planted on light soils where roots are fairly easy to dig. The variety we offer does not grow above the ground with a green shoulder, as do some strains. Pkt. 5c; oz. 10c.

French Forcing—A very popular variety for forcing. The root is globe-shaped, with a distinct tap-root. Color bright orange-scarlet. Pkt. 5c; oz. 30c.

#### CAULIFLOWER

Early Favorite—An early hard-heading variety. It is quite hardy and a good market variety. Pkt. 5c; 1/4 oz. 35c; oz. \$1.00; 1/4 lb. \$2.50.

Early Snowball—The best and most popular early variety grown. There is a vast difference in the strains of this variety offered, but what we offer is the best imported stock. Those who have had trouble with Cauliflower should try this Snowball. It will make uniformly fine heads even under adverse conditions. Pkt. 25c; 1/4 oz. 70c; oz. \$2.25; 1/4 lb. \$8.00.

Dry Weather—A strain of the Early Snowball type, which is especially adapted to California. It is a Danish variety (the best Cauliflower comes from Denmark) and is destined to become very popular in our climate. Pkt. 20c; 1/4 cz. 75c; oz. \$2.50; 1/4 lb. \$8.00.

California Wonder—A late variety, forming good, large, solid heads during the winter. This variety has given great satisfaction in California wherever tried. Pkt. 10c; 1/4 oz. 25c; oz. 75c; 1/4 lb. \$2.50.

#### CELERY

Giant Pascal—The most popular of the newer green winter varieties. Rather tall with stem nearly round, and when blanched is white, brittle and especially good flavor. Pkt. 5c; oz. 20c; 1/4 lb. 75c; lb. \$2.50.

Golden Self-Blanching, or Paris Green—The most popular market variety in use, especially for early crop. The plant is naturally golden-yellow (both stem and leaves) but needs to be blanched to make it brittle and fit for table use. Forms a rather small bunch. French grown. Pkt. 10c; oz. \$1.50; 1/4 lb. \$5.00.

White Plume—This is one of the most popular varieties now in use. Used mostly for a very early crop. A comparatively easy variety to grow, as it is fairly hardy, and being naturally white is easy to blanch. The leaves are also white, tinted with green at tips. Forms a medium-size bunch and is fairly tall. Pkt. 5c; oz. 25c; 1/4 lb. 75c; lb. \$2.50.

## CELERIAC

Giant Smooth Prague—The best variety. Forms a good, thick root as much as four inches in diameter, and nearly globular. Pkt. 5c; oz. 20c; 1/4 lb. 60c; lb. \$1.75.

#### EXTRA CHOICE CORN

Golden Bantam—A very early variety. The ears are but medium size but are thickly set with delicious yellow kernels. The quality of this variety is superb, and it has become a general favorite early Sweet Corn with all who have tried it. Pkt. 10c.

Golden Cream—A yellow Country Gentleman. Early and prolific and of delicious flavor. Pkt. 10c.

Country Gentleman or Shoe Peg—One of the best of the late varieties. Has a long white cob, closely filled with long "shoe peg" kernels. Is remarkably fine flavored and sweet, and is frequently used by canners. Pkt. 10c.

Stowell's Evergreen—The most popular and best main crop variety and the best allround table variety. Of good, strong growth, about six feet high. Ears keep in good condition for boiling for a remarkably long time. The quality is excellent. Pkt. 10c.

Early Red Cob Cory—One of the best extra early varieties. Ears are about six inches long, and eight-rowed and well-filled. This variety does especially well in the Coast counties. Pkt. 10c.

Early Minnesota—The best early variety for market and private gardens. Between Crosby's and Cory's in earliness. Stalks about five feet high; ears long and eight-rowed. Pkt. 10c.

Black Mexican—One of the best medium early varieties. Although when ripe the seed is dark bluish or black, when ready for table it is white. It is of especially fine, sweet flavor, and very tender. Pkt. 10c.

Early Mammoth or Alameda—The very best variety for practically all California, and the one most generally used here. Forms very large ears, which are quite sweet and of fair quality. It withstands our dry summers well, and is usually quite free from worms, and the ears fill well. Pkt. 10c.

Oregon Evergreen—This is without doubt the best Sweet Corn ever grown, and is a great favorite among market gardeners. It is very productive, bearing long, well-filled ears, and is of a particularly fine flavor. Many varieties of Sweet Corn do not thrive as well in California as in the East, but this variety seems particularly adapted to our local conditions, and produces ears of the very finest quality. Worms do not bother this variety. Pkt. 10c.

#### FIELD VARIETIES

Extra Early Adams—The earliest of all Corn and the first to make ears. Plant dwarf and stocky and grains of fair quality. Pkt. 10c.

Early Adams—Although not a Sweet Corn, can often be used as such on account of its fine white kernels, which are quite sweet and tender. Is very hardy and can be planted earlier than the late varieties of Sweet Corn. Pkt. 10c.

Learning—A very popular tall-growing variety. Is early, stalks are leafy, making excellent fodder. Kernels are long and deep golden-yellow. It is the best yellow corn on the market.

White Cap Yellow Dent—An early and hardy variety, growing 6 to 7 feet in height. Ears are 8 to 10 inches in length. Cob small and 16 to 18 rowed. The outer end of the grain is white, while the inner portion is clear yellow.

Sanford White Flint—An early, tall variety, bearing large ears, which are well filled with long, pure white kernels. The very best white corn on the market.

## CHOICEST CUCUMBERS

Arlington White Spine—A rich, dark-green variety, turning white when ripened. The fruit is about 7 inches long when in marketable condition and very straight and even in shape. Is early and good for forcing and out-of-door culture. Pkt. 5c; oz. 10c; 1/4 lb. 30c; lb. \$1.00.

Japanese Climbing—A medium-long, deep green variety, turning yellow at maturity. Fruit of rich, dark green color. The flesh is white, crisp, and of good flavor. Pkt. 5c; oz. 15c;  $\frac{1}{4}$  lb. 40c; lb. \$1.50.

Chicago Pickling—A medium-long, deep green variety, turning yellow at maturity. The fruit is finely shaped, being slightly blunt at both ends. It is the popular pickle variety in use about Chicago. Pkt. 5c; oz. 10c; 1/4 lb. 30c; lb. \$1.00.

Long Green-Well known long variety. Pkt. 5c; oz. 15c; 1/4 lb. 35c.

## CHERVIL-For Garnishing

Curled—Very finely curled, somewhat resembling parsley and used in the same manner. Pkt. 5c; oz. 10c.

#### WATER CRESS

Fine Curled—(Pepper Grass)—Leaves finely cut or curled like Parsley. The leaves are pungent and are used to mix with lettuce. Pkt. 5c.

True Water—Forms a plant, the leaves of which are used for salad or for garnishing. Thrives only when the roots and stems are submerged in water. Pkt. 10c.

#### DANDELION-For Greens

An easily grown plant, now much esteemed for greens, which are cooked like mustard and spinach. Sow the seed in May or June on good rich soil, and thoroughly cultivate, when the leaves will be ready to cut the following spring. An ounce will sow 200 feet of row.

Improved Large Leaved—The largest leaved and best cutting variety. Pkt. 10c.

## ENDIVE-A Salad Vegetable

Broad-leaved Batavian, or Escarole—A variety having wide, thick leaves, straight at the edges and curved toward the center. Color, dull green. Pkt. 5c.

Green Curled—A very curly variety, the midrib being wide and whitish and the outer edges very much indented and curled. A very attractive plant, and one of the very best varieties. Pkt. 5c.

#### **EGGPLANT**

Black Beauty—A very early variety; rich purple black in color and a remarkable market variety. Pkt. 10c.

Early Long Purple—An early variety and also a very profitable one. The fruit is long and of a rich dark purple. Pkt. 5c.

New York Improved Large Puruple—The principal market variety; plants are large and spreading; fruit large and of deep rich purple. Pkt. 10c.

#### KALE OR BORECOLE

Dwarf Curled Scotch—The most popular sort for general use. The leaves are very curly and very tender. Color bright green. Pkt. 5c.

Green Curled Scotch, Tall—A very hardy variety, growing about 2¼ feet high. Is very curly and makes a beautiful plant. Stands the winter well. Pkt. 5c.

Dwarf Purple German—Similar to Dwarf Curled Scotch, excepting the leaves are purple. Pkt. 5c.

Jersey Kale—A tall variety with smooth leaves. Especially used for feeding chickens. Pkt. 5c.

#### KOHL RABI

Early White Vienna—The most desirable variety for general use. Is very early and has small tops. Color, light silvery green. Pkt. 5c.

Large Green—A popular table variety, having a light green bulb. Pkt. 5c.

## **EDIBLE LEEK**

American Flag—A very good, strong-growing variety, forming large stems of good flavor. Pkt. 5c.

Giant Musselburgh—The best variety, having good, thick stems which are also long. Very vigorous and of sweet, mild flavor. Pkt. 5c.

## LOS ANGELES LETTUCE

Lettuce is represented by four distinct classes or types—by the thick-leaved, smooth-edged cabbage-heading type; the curly and thin-leaved tight-heading, crisp type; the cur-

Owing to the unusual conditions at this time, prices on seeds fluctuate so often we request our customers to WRITE FOR PRICES.

ly and thin-leaved bunching or non-heading type; and the Cos or celery type.

Los Angeles or New York—A large, crisp, tight-heading Lettuce which is a great favorite in the markets of Los Angeles and San Francisco. The quality is the finest and is an excellent Lettuce for the garden. Pkt. 5c; oz. 20c.

May King—A very early new variety, forming fine, hard heads within a few weeks after planting. It is a medium-sized, light green, with buttery but crisp heads. Pkt. 5c.

White Paris Cos—The best of the Cos or celery varieties. Forms a large, light-green plant, with the head well folded and quite solid. Cos Lettuce is also called Romaine, and is very popular with our foreign population, for it is highly prized in England and France, while little known to our people. Pkt. 5c; oz. 15c.

Prize Head—One of the very best loose-bunching or non-heading varieties. Leaves brown, very curly, and of remarkably fine flavor. Grows quickly and all except the outer row of leaves are very brittle. Is is probably the most easily grown Lettuce in cultivation. Pkt. 5c; oz. 15c.

Big Boston—A popular market variety, used largely in the South to grow winter Lettuce for Northern markets. A light-green cabbage variety, slightly tinged with brown in the head. Has a particularly fine golden buttery head. Pkt. 5c; oz. 20c.

California Cream Butter or Royal Summer Cabbage—A very popular variety for autumn and winter use. Forms a very large head, which is very buttery, and of a rich golden yellow inside. The leaves are thick and of bright green, slightly tinged with brown on top of head, and the outer leaves are slightly spotted with inconspicuous brown spots. Easy to grow and a good shipping variety. Pkt. 5c; oz. 15c.

Hanson—A fine, large-heading variety. Leaves curled on the edges; light yellowish-green in color. The head is crisp and brittle, and flavor excellent. Is the very best house garden variety in existence, and much the finest variety of its class. Pkt. 5c; oz. 15c.

## MUSKMELON AND CANTELOUPE

The Rocky Ford is a new and most valuable introduction, and has attained in an incredibly short time a national reputation. It is of the Netted Gem type, oval in shape, averaging from four and one-half to five inches in length, of a delicious flavor, very fine and smooth grained flesh, of a light green color throughout when ripe. Pkt. 5c.

Extra Early Hackensack—An early variety with almost globular fruit, which is heavily ribbed, and heavily netted. Flesh thick, and light green. Pkt. 5c.

Burrell's Gem—A medium-sized oval variety, deeply netted and having salmon or red flesh. It is larger than Rocky Ford and of an entirely distinct flavor. There is a growing demand for the fine grained, smooth, salmon-red fleshed Muskmelons and Burrell's Gem seems to be one of the best in cultivation. Pkt. 5c.

Fordhook—One of the best home garden Melons; of medium size, globe-shaped flattened at the ends. Roughly netted, while the skin showing through the netting is of emerald green. The flesh is rich salmon in color, very solid and of delicious flavor. The rind is extremely thin, and the seed cavity unusually small. Pkt. 10c.

Golden Beauty—The best of the winter casabas. Do not pick until the light streaks become quite yellow. Stow away in a cool, dark place, where the fruits do not touch each other. When the rind becomes slightly softened and moist they are ready to eat. Some of the Melons will actually keep till February. Pkt. 5c.

### WATERMELON

Florida Favorite—A very large, oblong fruit and dark green skin, mottled with a deeper shade. Rind thin, flesh deep red and of fine quality. The flavor is excellent and the Melon is well suited for either table or market. Pkt. 5c.

Halbert Honey—A large, oblong variety of the best quality, is especially sweet in flavor, crisp and brittle, and well ripened to a very thin rind. Pkt. 5c.

Angelino—A new Melon of great promise. Fruit round, deep green. Rind very thin, flesh bright red and heart unusually large and heavy. Ships well and sells readily in all markets. Pkt. 5c.

Chilian—A very brittle, thin-skinned variety, of highest quality, and especially valuable for home garden. It is slightly oblong; the skin is deep rich green, mottled and striped with a still deeper green; the flesh is bright red and the flavor is remarkably fine and sweet. Pkt. 5c.

Cuban Queen—An excellent shipping variety of medium to large size and globular to oval shape. Rind quite thin, flesh bright red and firm. Pkt. 5c.

Kleckley Sweets or Monte Cristo—A very desirable variety for the home garden or nearby markets. The most extensively grown shipping variety in California. Fruit medium-sized, oval, and skin dark green; flesh bright red and very sweet. It has the very sweet honey-like flavor that makes it especially distinct from all other varieties. Pkt. 5c.

The Lodi, or San Joaquin—Well known and popular California variety, grown on an immense scale in San Joaquin Valley and shipped to all parts of the Pacific Ccast. Fruit large and oblong, skin green and slightly mottled; rind thin but tough; flesh bright red and sweet; seeds white. Pkt. 5c.

Rattlesnake—One of the oldest and most popular sorts and frequently known as Gypsy. A large oblong variety with decided stripes of light and deep green. Rind is tough, but flesh is of good quality and bright red; a good shipping and market Melon. Is quite as generally used by the large Melon growers as Kleckley Sweets and is perhaps hardier and more profitable, being very easily grown. Pkt. 5c.

## MUSHROOM SPAWN

Mushroom Spawn—Cultural Directions: Ten pounds will spawn about ten square feet. Mushrooms can be grown in any dark room or cellar where the temperature can be kept at from 50 to 70 degrees. From some old pasture procure good rich soil, and to every bushel of this soil add two bushels of fresh horse manure. Of this well-mixed compound prepare a bed, say four feet wide. Put down a thin layer and pound it down hard, and go on until you have bed twelve or eighteen inches thick. As soon as the temperature of the bed falls from 75 to 50 degrees, the spawn may be inserted in pieces about the size of a walnut about two inches deep and six inches apart. Cover with loamy soil about two inches deep and beat it down evenly and firmly. Finish off with a covering of clean hay, about a foot thick, and the work is done. If the temperature is right, in six or eight weeks you may expect mushrooms. The beds will continue bearing from twenty to thirty days. After the first crop is gathered, spread over the bed an inch of fresh soil, moisten with warm water, and cover with hay as before. The main conditions in Mushroom growing are proper and uniform temperature and very rich soil.

American Mushroom Spawn—It comes in pressed bricks weighing about twenty ounces. Brick, 40c.

## MUSTARD

Giant Southern Curled—Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges. Hardy, vigorous, highly recommended. Pkt. 5c.

White English-Light green variety; tender leaves. Seed light yellow. Pkt. 5c.

## OKRA OR GUMBO

Perkins Mammoth Long Pod—A dwarf-growing, very early and prolific variety. Pods are long, slender, deep green and of fine quality. Pkt. 5c.

Dwarf Green-An early dwarf and prolific variety with thick, green pods. Pkt. 5c.

#### PRIZE WINNING ONIONS

Postage on Onion Sets is 5 cents per pound additional.

Brown or Yellow Onion Sets-Sept. to May. Lb. 25c.

Red Wethersfield—The best-known and most widely used red variety. In shade it is flatish, but thick, with very firm flesh. Is hard, and an excellent keeper, as well as a heavy cropper. The color is a bright purplish-red. Pkt. 5c.

Yellow Globe Danvers—The popular yellow globe Onion for market and shipping purposes. It is almost ball-shaped, but a trifle flattened at both ends. It is a heavy cropper, and is a good, firm, hard-fleshed variety. Pkt. 5c.

White Portugal or Silverskin—The best-known and most largely used white Onion. Is flat on the botom and thick toward the top. Very hard and firm and an excellent keeper. Is largely used for white Onion sets as well as for market onions and pickles. Pkt. 5c.

Ailsa Craig—The great English heavy cropper. Of giant size and immense weight Pkt. 10c.

Australian Brown—An early and very hardy variety which does especially well in the South. Should be planted early, on low, wet grounds, to get large bulbs. The skin is thick and the color is a rich brown. Is especially noted as a long keeper, as it keeps well into the spring, and much longer than other varieties. Pkt. 5c.

Yellow Danvers Flat—The best-known and most generally used flat, yellow Onion. Is the most hardy of all varieties for California and yields the surest and largest crops. Color bright orange-yellow; flesh white and firm. A good keeper, fairly early, and of good size. It is also a good variety for transplanting to get early Onions. One of the standard varieties on the San Francisco market, where it is often called "Silverskin", although of a light yellow color. Pkt. 5c.

Brown Globe—A fine, large, globe-shaped sort of a rich sea-brown color. It ripens uniformly and nearly every plant makes a solid, hard bulb. It has all the long-keeping characteristics of Australian Brown and is one of the very best varieties for market. Pkt. 5c.

## PARSNIPS

Hollow Crown—A variety with a hollow or cup-shaped top, where the leaf stem begins. The most popular and best variety for all purposes. Skin smooth and white, and flesh tender, while the root grows eighteen to twenty inches long. Pkt. 5c.

## PARSLEY

Double Curled—A curled variety, very hardy and easy to grow. Deep, rich green, and by many preferred to the extremely curly varieties. Pkt. 5c.

Extra Triple Curled—Very finely curled variety of dark-green color. One of the best varieties for all purposes. Pkt. 5c.

#### ARTHUR CANN'S CHOICE PEAS

Early Laxtonian—A very early variety, full pod, good size, very sweet. Lb. 25c.

Early Blue Bantam-Very similar to Laetonion. Early. Lb. 25c.

Gradus or Prosperity—One of the very best early varieties. Is a tall variety, growing about three feet high, and bears very long pods, which are pointed and well-filled

with large, sweet and very finely wrinkled Peas. The foliage and pods are light-green, and the plant s not very hardy. Pkt. 10c; Ib 35c, postpaid; by express or freight, Ib, 25c.

Thomas Laxton—A fine, early, tall variety, similar to the Gradus but more hardy and not quite so early. It is also a little darker in color and has large, blunt pods that fill well with Peas of finest quality. Pkt. 10c; Ib. 35c, postpaid; by express or freight, Ib. 25c.

Premium Gem, sometimes called Little Gem—The best and most popular dwarf, wrinkled variety, especially with market gardeners. It grows about fifteen inches high and bears good-sized pods, which are filled with six to eight Peas of especially fine, sweet flavor. Pkt. 10c; lb. 30c, postpaid.

## CANN'S LATER MARKET PEAS

Alderman (Late)—A new Pea like Telephone. The vine is extra vigorous and the pods of Alderman are dark green and always well filled with peas, which should be staked. There is none better than the Alderman. Pkt. 5c; Ib. 25c; 10 lbs. \$2.00.

Stratagem—A semi-dwarf variety with large leaves and large pods. Of all the Peas we list and all of those we have tried, we do not know of another variety so well adapted to most sections of our coast as Stratagem. The vines bear well, and the pods are long, thick and well filled. This variety has a tendency to run out or revert to a smaller podded type, and many stocks of Stratagem offered contain many small podded plants. Prices—Reselected strain, Pkt. 10c; Ib. 30c, postpaid; by express or freight, Ib. 20c.

Telephone—The best mid-season variety, is tall and large; wrinkled peas of remarkably fine quality. A popular home garden and market variety. We have an especially fine, pure stock this year. Pkt. 10c; lb. 35c, postpaid; by express or freight, lb. 25c.

Yorkshire Hero or Alameda Sweets—A very hardy and prolific, semi-dwarf, wrinkled variety. The Peas are large and of fine quality and the pods, which are broad and medium-sized, remain in condition for a long time. It bears immense crops, both of pods and dried Peas, and is the variety most largely planted by gardeners. Pkt. 10c; lb. 30c, postpaid; by express or freight, lb. 20c.

#### ARTHUR CANN'S CHOICE PEPPERS

Chinese Giant—A very large, deep-red variety, very thick and blunt. It is fully twice as large as Bell, or Bull Nose, being four or five inches thick at the top and about six inches long. Pkt. 10c; oz. 60c; 1/4 lb. \$1.75; lb. \$6.00.

Large Bell, or Bull Nose—The most popular variety for stuffing. Fruit large, round and blocky, and about three inches long and two inches thick. The color is deep green when fruit is young, but when fully ripened it is a rich, glossy blood-red. Pkt. 5c; oz. 30c; 1/4 lb. 35c; lb. \$3.50.

Long Red Cayenne—A strong, pungent variety, having long, pointed fruit, which is bright scarlet when ripe. A well-known and popular variety. Pkt. 5c; oz. 25c; 1/4 lb. 75c; lb. \$2.50.

Sweet Mountain or Spanish Mammoth—A very popular variety with some market gardeners. It is a late variety, bearing large, thick fruit which is frequently eight inches long and two or three inches in diameter. When mature, it is a deep glossy-red and the flavor is mild and sweet. Pkt. 5c; oz. 25c; 1/4 lb. 75c; lb. \$2.50.

## CANN'S BEST PIE PUMPKINS

Connecticut Field, or New England Pie—A fine, large, orange-colored variety, used for field culture and stock-feeding. The skin is smooth and ribbed and the flesh is brittle and sweet. Pkt. 5c; oz. 10c; 1/4 lb. 20c; lb. 50c, postpaid.

Large Cheese, or Kentucky Field-A very large, flattened variety, averaging about two feet through. When ripened the skin is a rich cream color. Flesh yellow of fine quality. Pkt. 5c; oz. 10c; 1/4 lb. 20c; lb. 60c, postpaid.

Mammoth King, or Potiron—The best large Pumpkin in use. Forms immense globular melons, flattened a little at the end. Skin reddish-yellow in color and flesh rich orange. This is unquestionably the very best mammoth Pumpkin we have. It runs very uniform in shape and color and all are of immense size. Pkt. 5c; oz. 15c; 1/4 lb. 45c; Ip. \$1.50.

Common Field-The well-known, ordinary Pumpkins, largely used for stock feeding. The fruit is variously colored in yellow, drab, red and orange, and varies also in size, but is usually very large. Pkt. 5c; lb. 40c, postpaid; by express or freight, lb. 30c; 10 lbs. \$2.50.

Mammoth Golden Cushaw-One of the best stock-feeding varieties. Is a solid, yellow crook-necked scrt, and is nearly all flesh, having a very small seed cavity. Pkt. 5c; oz. 10c; lb. 90c.

Pie Pumpkin-A small, round, yellow sort, with fine, pinkish netting. thick, sweet and of excellent quality. Pkt. 5c; oz. 10c; 1/4 lb. 25c; lb. 75c, postpaid.

Small Sugar-A small, round variety of excellent quality. The flesh is rich yellow, very thick and sweet, and the skin is deep orange. We recommend this variety as the very best for pies. Pkt. 5c; oz. 10c; 1/4 lb. 25c; lb. 75c, postpaid.

### CANN'S CHOICEST RADISHES

Scarlet Turnip, White Tipped or Rosy Gem-One of the most popular and attractive short varieties. Pkt. 5c.

Early Scarlet Turnip—A valuable variety for forcing or outdoor culture. Is a small, turnip-shaped variety, and in color entirely crimson. Pkt. 5c.

Early Scarlet Globe-A popular forcing variety, owing to its very quick growth and fine, bright scarlet color. Shape a trifle oblong. Pkt. 5c.

Brightest Long Scarlet-A very showy, long variety. Pkt. 5c.

Chinese White Winter, or Celestial (or California Mammoth White Winter)-The well-known and popular winter variety. Clear white, about four inches long and half stump-rooted. Keeps firm and crisp until it runs to seed. Is a good cooking variety and when cooked the flavor resembles turnip. Pkt. 5c.

Early White Turnip-A very quick-growing, small, turnip-shaped variety. Pkt. 5c.

French Breakfast-A popular variety for maket or forcing. It is about two inches long and decidedly stump-rooted. Pkt. 5c.

Half Long, or Olive Shaped-The variety most largely used by gardeners in California. It is about three inches long with half stump-root and sloping top. Pkt. 5c.

lcicle-A handsome white variety, about five inches long, with sloping top and pointed root. Quick growing, brittle and mild in flavor. Pkt. 5c.

## CRIMSON WINTER RHUBARB

Myatt's Victora—A very large, late variety with green stalks. It comes fairly true from seed. Roots—15c each, \$1.50 per dozen. Weight estimated 2 lbs. per dozen.

Wagner's Giant—(Giant Crimson Winter)—The grower describes this as "about twice the size of Burbank's Giant Winter, and four times the size of the smaller sorts of Rhubarb. Average stem is 1½ feet long and weighs ¼ lb." This novelty has all of the good qualities of Crimson Winter plus large size. A sure money maker and the very best variety. Roots-25c each; \$2.50 per doz. Estimated weight, 2 lbs. per doz.

## SALSIFY OR VEGETABLE OYSTER

Mammoth Sandwich Island—The improved, large-rooted variety, growing about 12 inches long and being from 1 to 2 inches thick. Pkt. 5c.

#### CANN'S CHOICEST SPINACH

Bloomsdale Savoy—The variety most generally used in the East, and especially throughout the South for shipping. Leaves large, round and thick, very much savoyed and rich, deep green. One of the earliest varieties. Seed, round. Pkt. 5c.

Long Standing—A deep green variety with rather elongated smooth leaves. Seed round. Stands a long time without running to seed. Pkt. 5c.

Prickly—The variety commonly used for market in California. Is very hardy and easily grown; bears large, smooth leaves, which are shaped like an arrow point. Color, bright green. Seed, irregular, with three or four sharp points. Pkt. 5c.

## CHOICEST SUMMER SQUASH

Early White Bush Scallop—A very early variety, with flat, creamy white, scalloped Squashes, four to six inches in diameter. The vine is bush in habit and rather dwarf. This variety is the common "patty pan" Squash. Pkt. 5c.

Mammoth Summer Crookneck—A large golden-yellow variety, thickly warted, is eighteen inches long, brittle and tender. Plants are bush and very prolific. This is an improved strain of the old variety and considerably larger. Pkt. 5c.

Mammoth White Bush Scallop—A fine, large variety with round, scalloped fruit twelve to fourteen inches in diameter. Color white, clear and wax-like. Pkt. 5c.

Vegetable, or Italian Marrow—A large, oblong variety, producing fruit which is dark green at first, becoming marbled and striped with yellow and lighter green as they mature. Pkt. 5c.

Yellow Summer Crookneck—The well-known summer variety. Fruit long, skin very much warted, bright golden yellow. Pkt. 5c.

## THE BEST WINTER SQUASH

Boston Marrow—A popular variety, with large, oval fruit. Skin bright, reddishorange, with light cream netting. Flesh, orange. Fine grained and of excellent quality. This is the most popular variety for canning. The California canners plant several hundred acres annually and the fruit makes a rich crange-red, and deliciously flavored dish. Pkt. 5c.

Hubbard—The most popular and widely used for the winter Squashes. Fruit is oblong and pointed, heavily warted, dark green color, with orange colored flesh. Is remarkable for its keeping qualities. Pkt. 5c.

Fordhook—A good variety for early winter or even summer use. The fruit is oblong, slightly ridged; is creamy yellow outside and the flesh is thick and when cooked is of most delicious flavor. Is solid and hard and is a splendid keeper. Pkt. 5c.

Golden Hubbard—An exceptionally attractive variety of the true Hubbard type. At maturity the color is red and the flesh bright orange. The vine is productive and the fruit fit for use earlier than the Hubbard. Pkt. 5c.

#### CANN'S CHOICE TOMATOES

San Jose Canner—A grand novelty, very highly recommended by us. As the name implies, this is the favorite canning Tomato in the large district in this valley. San

Jose Canner is scarlet in color, of large size, and yields an enormous tonnage. Pkt. 10c; oz. 60c: lb. \$5.00.

Ponderosa—An extremely large, irregular-fruited variety. Vine tall, and fruit very solid and purplish-carmine in color. Rather coarse and of fair quality only. Pkt. 10c; oz. 40c; 1/4 lb. \$1.00; lb. \$3.50.

Earlina (Sparks)—The earliest tall variety, forming ripe fruit much earlier than any other variety. The fruit is large, smooth, of a bright scarlet color, and of fine quality. Very valuable for early market use. Pkt. 10c; oz. 35c; 1/4 lb. \$1.00; 1 lb. \$3.25.

Matchless—A tall-growing, prolific variety, with large fruit, which is rather flattened, smooth and uniform. Color, bright scarlet. For canning and general main crop market, there is no better Tomato grown. Extra selected strain. Pkt. 10c; oz. 30c; 1/4 lb. 90c; lb. \$3.00.

Stone—The best main crop variety for all purposes, and largely used for canning. Vine tall and prolific. Fruit smooth, large and uniform. Color, bright scarlet. Pkt. 5c; oz. 25c; 1/41b. 75c; lb. \$2.25.

Trophy—An old favorite much esteemed for its productiveness and hardiness. The fruit is somewhat irregular, but of fine quality, and is valuable for canning. The true stock is scarlet in color, and the fruit shows a distinct navel at the blossom end. Pkt. 5c; oz. 20c; 1/4 lb. 60c; lb. \$2.00.

#### TABLE TURNIPS-Best Strains

Early White Flat Dutch (Strap Leaf)—A medium-sized, flat variety; clear white, early and of fine flavor. A fine table variety. Pkt. 5c.

Purple Top Flat Dutch (Strap Leaf)—An early flat variety. White, with purple top. Probably the most popular and generally used garden variety. It matures quickly and has fine grained flesh of mild flavor. Pkt. 5c.

Purple Top White Globe—A valuable sort for either table use or stock-feeding. Roots globe-shaped, white, with purple top. Flesh white, firm and tender. Pkt. 5c.

## RUTABAGAS OR SWEDES

American Purple Top, or Long Island—One of the best and most popular varieties, with yellow flesh. It is yellow below ground, with purple top above, and the leaves are small. A good feeding or table variety. Pkt. 5c.

Large White, or Sweet German—A very large variety, with white skin and white flesh, which is tender and sweet. Pkt. 5c.

#### VEGETABLE PLANTS AND ROOTS

We carry the following plants in the season shown and pack them very carefully for shipping:

Artichoke Plants-January to May. Doz. \$1.00. Too heavy to mail.

Asparagus Roots. Two years old. January to April. Doz. 25c. (postpaid 30c doz.); 100 plants \$1.00; special price per 1000.

Cabbage Plants. November to June. Doz. 15c; 100, 85c; doz. 20c, postpaid.

Cauliflower Plants. November to June. Doz. 20c; 100, \$1.00; doz. 25c, postpaid.

Celery Plants. March to May. Doz. 20c; 100, \$1.20; doz. 25c, postpaid.

Egg Plant-March 15th to May 15th, Doz. 25c; doz. 30c, postpaid.

Garlic-November to May. 25c per lb.

Owing to the unusual conditions at this time, prices on seeds fluctuate so often we request our customers to WRITE FOR PRICES.

Horseradish Roots. January to May. Extra large roots, 15c each, or \$1.00 per 10. Pepper, Large Bell. March 15th to May. Doz. 15c; 100, \$1.00; postpaid 20c.

Rhubard Roots. December to May. Each 15c; doz. \$1.50; doz. \$1.75, postpaid.

Rhubarb Roots, Crimson Winter. Each 25c; 5 for \$1.00, postpaid, additional 5c each root.

Sweet Potatoes. April to June. Doz. 20c; 100, \$1.00; doz. 30c, postpaid.

Tomato, Extra Early Plants. March. Doz. 15c.

Tomato, Stone, Etc. April to June. Doz. 15c; 100, \$1.00; doz 20c, postpaid.

Herbs, Chives, Sweet Marjoram, Sage, Savory, Thyme, Tarragon.. Two plants of any kind, or assorted, for 25c, postpaid 35c.

## SEASONS TO PLANT IN CENTRAL CALIFORNIA

| Variety          | When to Sow                        |
|------------------|------------------------------------|
| Artichoke        | January to March—Plant Roots       |
| Asparagus        |                                    |
| Beans, Broad     |                                    |
| Beans, Bush Lima | May                                |
| Beans, Pole Lima | April to May                       |
| Beans, Wax       | April to August                    |
| Beans, Pole      | April to August                    |
| Beets            |                                    |
| Broccoll         | January to April                   |
| Brussels Sprouts |                                    |
| Cabbage          | . January to April—July to October |
| Carrot           | All year round                     |
| Cauliflower      |                                    |
| Celery           |                                    |
| Corn             | April 15th to July                 |
| Corn Salad       |                                    |
| Cucumber         |                                    |
| Egg Plant        |                                    |
| Endive           |                                    |
| Kale             | January to April—July to October   |
| Kohl Rabi        |                                    |
| Lettuce          |                                    |
| Muskmelon        |                                    |
| Watermelon       |                                    |
| Mustard          |                                    |
| Okra             |                                    |
| Onion            | ·                                  |
| Parsley          |                                    |
| Parsnip          |                                    |
| Peas             |                                    |
| Pepper           |                                    |
| Pumpkin          |                                    |
| Radish           | ·                                  |
| Rhubarb          |                                    |
| Rhubarb Roots    |                                    |
| Salsify          |                                    |
| Spinach          |                                    |
| Squash           |                                    |
| Tomato           |                                    |
| Turnip           |                                    |
| Vegetable Marrow | -April to June                     |

Of the above, all are planted out of doors except Egg Plant, Peppers and Tomatoes, which should be started early in frames or in the house, and transplanted out of doors about the first of May.

#### CANN'S CLOVER SEEDS

The prices of some varieties of Clover, Grass and Field Seeds may change as the season advances. Prices now given are those prevailing when this catalog was published. It will be to advantage of intending purchasers to write for samples and special prices before ordering in large quantities.

Alsike or Swedish Clover (Trifolium Hybridum). A perennial variety sometimes preferred to Red Clover, as it is generally finer and makes better hay for horses. The Blossoms are also valuable for bees. Alsike succeeds on wet, cold and stiff soils. When used alone sow 8 to 10 pounds per acre.

Bokhara, or Sweet Clover (Melilotus Alba). Grows 3 to 5 feet high, covered with small white flowers of great fragrance. Very valuable for bee pasture. Sow 10 pounds to the acre.

Burr Clover (Medicago Denticulata)—The native forage plant of California. Of the easier culture, growing all winter and well into summer. We offer only "Hulled Seed," which is much easier to sow than in the burr. Sow from August to October, using 15 to 20 pounds of hulled seed per acre.

Mammoth Red or Sapling (Trifolium Pratense). Similar to Red Clover, but coarser, taller and more hardy. Sow from 12 to 15 pounds per acre.

Crimson or Italian (Trifolium Incarnatum). An annual variety growing 20 to 30 inches high, and having long, crimson blossoms. Excellent for both pasture and hay. Sow from 12 to 15 pounds per acre, and cut for hay when in full bloom.

Japan Clover (Lespedeza Striata). Thrives in any soil and in the driest seasons; it makes fair hay and stock eat it readily when green. Sow in the spring, 15 lbs. per acre.

Red Clover (Trifolium Pratense). Standard clover for all purposes. Yields the heaviest crop of any variety except alfalfa, makes superior hay, especially if mixed with timothy. Sow from 12 to 15 pounds per acre.

White Dutch (Trifolium Repens). Dwarf, spreading, vine-like variety, with white blossoms; used largely for bee pasture. It is also an excellent pasture plant for either sheep or cattle; also makes a beautiful lawn. Sow 10 pounds per acre.

Peruvian Alfalfa. A new long variety just put on the market now. A grand variety for Southern California.

Turkestan or Dry Land Alfalfa. We make direct importations of this seed and we can recommend it for situations where water is not abundant. We suggest that it be seeded a little heavier than the ordinary type, as it is inclined to become coarse and woody; and thick sowing will produce finer plants. It is proving very satisfactory in the San Joaquin and Sacramento Valleys, and other parts of the state, where it is not possible to irrigate. We can supply this in original package or in smaller quantities.

Extra Choice Recleaned Alfalfa. The best acclimated sort, and recommended for all-round growing. We are always prepared to quote the lowest market prices for seed.

## SUDAN GRASS FOR HAY

Sudan Grass Hay is superior to Millet Hay and is said to equal timothy. The yield per acre is from 2 to 8 tons. It may be cut with a mower just after full bloom. From seeding to the first cutting 75 to 80 days are necessary.

## **HOW TO MAKE LAWNS**

Directions for Making a Lawn. Prepare the soil well; this means spade it over and dig in some fertilizer or manure. Let the ground stand a month, or else do not apply fertilizer until grass is three months old. Two weeks before planting roll and water the ground well and before sowing the seed hoe the soil but do not spade it.

This will kill countless thousands of small weeds which are always in the soil and would

otherwise have to be pulled up by hand—a laborious job.

Sow the seed evenly and roll it in or sprinkle a good cover of sandy loam over it. Where a roller is not available, rake the seed in lightly and press down by patting with spade. Water twice a day until grass comes up. In stiff, clayey soils, if planting in summer, use straw or leaves to protect the germinating seeds until the grass is an inch high. Make the lawn any time of the year if there is plenty of water. Use one pound of seed to 200 square feet of lawn. Keep free from weeds, water well, and cut regularly.

## GRASSES FOR LAWNS

Australian Rye Grass. The Australian Rye Grass makes a very hardy, bright green lawn, and, if treated with care, a very satisfactory one. It will grow and flourish on sandy soils. 25c a lb.

Kentucky Blue Grass makes an excellent lawn of a dark-green color. It forms a fine mat, and with care and water is the best lawn grass for all soils except sandy ones. By express or freight, per lb. 30c.

Cann's Putting Green Mixture. This makes a very springy fine turf which will mat and stand lots of hard wear. Per Ib. 40c.

### CANN'S SPECIAL BLUE GRASS

The highest grade of Kentucky Blue Grass that we can buy. Secured direct from the growers—a carefully selected purchase of what is known as a 27-pound Blue Grass. An exceptionally heavy seed that grows well and soon forms a magnificent lawn easy to keep. We recommend this seed for those wanting a lawn of first quality. By express or freight, pound 50c.

Special Shade Mixture. If you are troubled by a shaded spot in your lawn under some tree, where grass ordinarily will not grow, plant our "Special Shade Mixture" and you will soon have a lawn there as good as elsewhere. Our mixture is made from natural wood grasses, which grow in shaded places, and for such location it is unequaled. By express or freight, per lb. 60c.

#### IMPROVED PACIFIC RYE GRASS

Pacific Rye Grass—The best grass for a straight lawn in sandy soil. Longer lived and much finer in leaf than the hardy Australian Rye Grass. Lb. 35c, postpaid.

### COVER CROPS OR GREEN MANURE

The importance of green manures or cover crops has long been recognized as one of the best methods of enriching the soil—putting into it what the growing crops have been taking out so that succeeding crops will be fully up to the standard and bear as well or better before the soils become impoverished. Cover crops are used also to put in condition poor and worn-out soils and when used in connection with orcharding—results have proven that the fruit crops are larger and better in every way from 33 1-3 to 40 per cent. Taking into consideration the small cost of using green manures—this is an ideal method for enriching the soil.

#### CANN'S BITTER CLOVER

Melilotus Indica—Or Bitter Clover is one of the most valuable of all cover crops. It is an annual, quick-growing cover crop, not good for forage or hay. It starts early to grow and is of good size when ready to plow under. Our seed is carefully selected stock noted for early and quick growth and farmers and orchardists will find it invaluable in enriching soils. As a green manure it takes top rank and because of its cheapness and the ease with which it is grown, it is one of the leading cover crops. We have received

high recommendations of this clover from practical farmers. It requires 20 to 25 pounds of seed to the acre. Price on application.

## CANN'S ORIENTAL BEANS

A cover crop we import from China. Very similar to the Broad Windsor or Horse Bean. One of its greatest qualities aside from its forage and use as a green manure—is the fact that it is BUG PROOF. The pods are thus left in excellent conditions for use as food for hogs and may be used either green or dried. It is one of the most fattening foods for hogs and thrives well in this climate. We recommend the Oriental Bean to those who wish to enrich their soil by the planting of a cover crop and to those who wish to combine the two—using the Bean for an animal food as well and turning under later.

Price per lb. 10c; 100 lbs. for \$7.00. Prices on larger quantities on application.

#### CANN'S GRASS SEED

Awnless Brome Grass (Bromus Inermis)—Will stand droughts and produce heavy crops in dry sections and on poor soils where other grasses perish. It is one of the hardiest grasses and succeeds on our dry hillsides. Sow 35 lbs. per acre.

Creeping Bent Grass (Agrostis Stolonifera)—Being of fine texture this grass is most valuable for lawns, and ideal for putting greens. It is of rapid growth and spreading habit, and makes a strong, enduring turf. Sow 40 lbs. per acre.

Crested Dog's Tail (Cynosurus Cristatus)—Should enter in moderate quantity in permanent pasture and lawn mixtures. It does well in the shade, roots deeply, is stoloniferous and perennial. Valuable in mixture for laws, putting greens and for pasture. If sown alone 30 lbs. should be used per acre.

Hard Fescue (Festuca Duriuscula)—A dwarf-growing grass, forming a dense, rough mat, succeeding well in dry situations. Valuable as pasture on dry lands and sandy soils. Not recommended for lawns but valuable for fair greens. Sow 30 lbs. per acre.

Italian Rye Grass (Lolium Italicum)—Thrives in almost any soil and yields early and abundant crops. Sown in the fall, will produce an excellent hay crop the following season, but lasts only one year. Much sown in Humboldt County for pasture and hay. Not recommended for lawns. Sow 50 lbs. per acre.

Meadow Feecue or English Blue Grass (Festuca Pratensis)—A valuable grass for permanent pastures and for meadows for cutting which are rather damp. Makes a quick second growth, but does not do well on dry soils. Often sown in mixtures. Sow 30 lbs. per acre.

## CANN'S CHOICE GRASSES

Orchard Grass or Cocksfoot (Dactylis Glomerata)—One of the most valuable of all pasture grasses; produces an immense quantity of forage, and hay of best quality. After being mown, comes up quickly and yields very heavily. Suitable for pasture under trees. Sown in the ashes on cleared redwood land in Humboldt County. Not suitable for lawns as it grows in tussocks. Sow 35 lbs. per acre.

Pearl Millet (Pencillaria)—A perennial plant for fodder. Grows tall and yields an enormous amount of corn-like leaves. Sown in drills or broadcast, using three to five lbs. per acre if in drills, or 25 lbs. broadcast.

Perennial Rye Grass (Lo!ium Perenne)—Grows rapidly and makes a good showing within month from time of sowing; grows very rapidly. The great pasture and meadow grass of Great Britain. Valuable for planting early on dry hillsides, as it grows so very quickly. A good lawn grass but a little coarse. Sow 60 lbs. per acre.

Owing to the unusual conditions at this time, prices on seeds fluctuate so often we request our customers to WRITE FOR PRICES.

Red, or Creeping Fescue (Festuca Rubra)—Forms a close, rich sod, and is valuable in lawns and should be in shade mixtures. Makes a close, lasting turf on dry, sandy soils, and can be used to bind dry banks. Also an excellent bottom grass for moist mixture. Sow 30 lbs. per acre.

Red Top (Agrostis Vulgaris) Herd's grass. Second only to timothy as hay grass, and better if the ground is to be pastured afterward, for Red Top makes one of the best permanent pastures. Succeeds on all soils, though doing best on moist and even swampy land. A permanent grass and valuable as a lawn grass, giving quick effect. Sow 40 lbs. per acre. Fancy, sow 15 lbs. per acre.

Rhode Island Bent Grass (Agrostis Canina)—Like Red Top, this grass accommodates itself to all soils. Especially valuable for lawns on sand at the sea coast; from it the lawns at Newport are largely made. Is perennial, dwarf and makes a beautiful, fine, close turf. For lawn sow 50 lbs.

Sheep's Fescue (Festuca Ovina)—Short and dense in growth, excellent for sheep pastures, because it will thrive on poor, gravelly, shallow or hilly soils where other grasses fail. Not recommended for lawns under ordinary conditions because it bunches. Sow 35 lbs. per acre.

Timothy (Phleum Pratense)—The grade we offer is particularly "choice," free from weed seeds and of high germinating power. Timothy is the great standard hay grass of the Eastern part of the country. It makes hay of the best quality, and produces a larger crop on good soil than any other grass. Not adapted for pasture as there is little growth after cutting, and tramping of stock soon destroys it. Not a lawn grass and not adapted to dry soils; height two to three feet. Often sown with Red Top and Red Clover. Sow 15 to 20 lbs.

### CANN'S FIELD SEEDS

Rape (Dwarf Essex)—A biennial crop, used principally for sheep pasture, of which it yields an abundance of the best quality. Is usually sown broadcast on ranges, using four or five lbs. per acre.

Soja Bean—Valuable as forage crop or green manure. Also as a green fodder and silo plant. Sow 30 lbs. per acre after danger from frost is passed.

Sunflower (Large Russian)—A variety bearing large heads, frequently 12 to 20 inches in diameter and sometimes yielding 1000 pounds of seed per acre. The seed is used for feeding chickens and parrots. Sow in the open field as soon as danger from frost is over, using three lbs. of seed per acre, sowing in rows five feet apart and thinning to one foot.

## MISCELLANEOUS FIELD SEEDS

Prices fluctuate during the season; so we will ask parties interested in quantity to ask for quotations.

Vetch, Hairy (Vicia Villosa)—A pea-like plant, growing about four feet high and doing well on dry, sandy soils for forage. Also a valuable, green-manure plant for sowing in the fall. Sow broadcast 30 to 50 lbs. per acre. Sown in the fall this plant may be cut twice; is perfectly hardy and grows well in winter.

Vetches, Spring or Tares (Vicia Satvia), also called Common Vetch, Oregon Vetch and Oregon Winter. A plant resembling pea vines and valuable for forage or green manure. It is usually sown with oats or wheat to hold them up. Sow 60 lbs. per acre with grain, or 80 to 100 lbs. if sown alone. Is hardy and makes a fine winter growth. Largely planted in the orange groves of the South for green manure and plowed under in the spring.

Black Eyes—The common Cow Peas, often called Black-eyed Bean; already grown extensively in California. Our seed is of uniform size and quality.

## HAIRY PERUVIAN ALFALFA-21/2 Tons More to the Acre than Ordinary Alfalfa.

Alfalfa Hay has the highest food value of any ration used for farm animals, and the variety that will give the best results will be the best seller. Hairy Peruvian Alfalfa, or the "New Wonder," as some alfalfa growers call it, gets its name from the protecting coating of fine fuzz or hair covering it during the early stages of growth, also in cold weather, gradually disappearing as the warm weather comes on. This type produces a great mass of large leaves from the top to the very crown of the plant. It thrives equally well at a height of 4000 or 5000 feet, as at a lower latitude or at the sea level, and produces heavily under all climatic conditions practically the entire year. It will give abundant crops for a gereation; buy this to secure the largest tonnage. It takes no more land, and does not require any more water.

### ARTHUR CANN'S FLOWER SEEDS-WHEN TO PLANT FLOWER SEED.

In describing many of the different flowers we have used the terms "annual," "hardy annual," "tender annual," "tender perennial," etc. These may have seemed to you tiresome descriptions, but properly understood they tell much about planting. The dates in the following brackets will vary much with the time that heavy frosts come in different places. While they show the best months for San Francisco, planting may be extended much later in all cases.

Tender, or Greenhouse, means the plant will not stand the least frost. All such must be planted late in spring (May) or in a greenhouse.

Half Hardy means the plant will stand any light frost, but needs protection against very cold weather. These should be planted in the spring (March and April), not in the fall.

Hardy means the plant will stand considerable frost, or practically all we have on the Pacific Coast. These may be planted in the fall or in the spring, (October to May). If sown in the fall they will come into bloom much earlier than if sown in the spring. Even if the plants do not make much progress during the cold weather.

Annuals are plants that bloom the first year from seed, and the plant dies after one season. Tender annuals must be sown in the spring (April to June) and hardy annuals may be sown in either spring or fall (October to May).

Biennials are plants that bloom the second year from seed, and the plant dies after the second year. In California many of these will bloom the first year if sown early. Sow under same conditions as perennials.

Perennials are plants that bloom the second year from seed, and the plant lives and blooms during successive years. If sown in early spring (February to April 5) many perennials will bloom the first year from seed. Tender and half-hardy perennials are best sown in spring after frost is over (April 15 to June). Hardy perennials are best sown in the late summer and early fall (July to October) for next years' flowers.

How to Sow Flower Seed. It is best in practically all instances except hardy annuals to start the seed in boxes, preferably a box about 18x24 inches and 4 inches deep, using very sandy soil with leaf mold that will not bake, and provide for drainage by boring some holes in the bottom of the box. It is best not to put any fertilizer in the seedbox, since it is only necessary to bring the plants to the third or fourth leaf, when they should be pricked out and reset in another box, in which the soil should be loam mixed with leaf-mould. It is important that the plant be of good size, strong and sturdy, when finally transplanted in the garden.

If the seed be sown directly in the garden, it should be sown in the spring after the soil is well worked and fertilized. A slight depression should be made with a stick, the seed sown, and then covered with sharp sand about twice the depth of the diameter of the seed. The sand will prevent the crusting over of the soil after watering.

When up, the plants must be thinned from two to twelve inches, depending on the variety, otherwise they will be weak and spindling. It is a common mistake in the garden to leave plants altogether too thick. Always keep the weeds out.

A common mistake in sowing flower, as well as other seeds, is covering too deep. As a general rule, cover only to the depth of the thickness of the seeds; or, with medium-sized seeds, like Balsams, Zinnias, etc., half an inch or less is the proper depth.

#### .. CANN'S CHOICEST FLOWERS

Alyssum (Maritimum)—A fragrant, hardy annual, having the odor of honey, and bearing spikes of small, white flowers in great profusion throughout the summer and autumn. Useful for borders of early bedding flowers. Sow the seed early in spring.

Common Sweet Alyssum—One foot high, very sweet, honey fragrance. Pkt. 5c; oz. 25c.

Ageratum (Floss Flower)—A hardy annual of easy culture, especially valuable for bedding, as it is literally covered with blossoms all summer. Sow the seed early in the spring, either in boxes to transplant, or out of doors, and thin to four or six inches.

Blue Perfection-Deep blue, one foot high. Pkt. 5c.

Mexicanum, Imperial Dwarf Blue-Eight inches high, flowers blue. Pkt. 5c.

#### GIANT ASTERS.

Comet—A good bedding variety, with large blossoms, the petals of which are long, narrow and curled backward. These colors are the best: Pink, Light Blue, Pure Lilac, Carmine, White. Pkt. 10c. Mixture of all colors, pkt. 10c. Collection of five varieties, 40c.

Giant Comet—A taller growing variety of the Comet type with branching stems, which makes it valuable for cutting. Best colors: Crimson, Dark Violet, Light Blue, Rose, White, The Bride (white, changing to light rose). Pkt. 10c. Collection of all varieties, 50c. Mixture of all colors, pkt. 10c.

Hohenzollern—A new variety of the Comet type, with blossoms fully twice as large as the old variety. The petals are very long and curved like a flat chrysanthemum. Plant of branching habit, about sixteen inches high. Mixture, Pkt. 10c.

Truffant's Paeony Flowered Perfection—This variety has the most brilliant and shown assortment of colors. Flowers medium sized and almost globular. Plant about sixteen inches high, of upright growth, and flowers all borne on top. Best colors: Dark Purple, Fiery Scarlet, White. Pkt. 10c. Mixture of all colors, Pkt. 10c.

Victoria—One of the best bedding varieties, with medium-sized blossoms, which are borne in great profusion from the bottom to the top of the plant. Grows 12 to 14 inches high. Best colors: Rose, pkt. 10c; Snow White, pkt. 10c; mixture of all colors, pkt. 10c.

Semples, or Giant Branching—The tallest and best florists variety, and we heartily recommend it as the very best type of Aster we have. The plant grows 18 inches high and about 18 inches in width, and the blossoms, which are large and full-petaled, all borne on long stems or branches. The most satisfactory type of all Asters, since it is not only a showy bedding flower, but owing to its long stems and large blossoms is valuable for bouquets. Comes into flower late in the autumn. Best colors: Carmine, Lavender, Pink or Rose, White, Violet King, Crimson, Light Blue, Purple, Mary Semple (very light pink). Pkt. 10c. Mixture of above colors, pkt. 10c; oz. \$1.25.

#### CHOICEST BEGONIAS

Choice Fiberous Rooted Varieties.—For outdoor culture, having beautiful leaves and bearing clusters of small, waxy flowers.

Vernon.—Deep-red flowers and dark-purple foliage, often used for borders and for bedding; half hardy. Pkt. 10c.

Tuberous Rooted Varieties; per bulb 10c. For greenhouse and pot culture, having large, waxy flowers in brilliant colors.

Calceolaria.—Very hardy annual, one foot high, blooming in large profusion of small pocket-shaped flowers, many of which are beautifully tigered or spotted. There is a great variety of shade in various markings.

Grandiflora.—Large-flowered, self-colored, profuse flowers. Pkt. 25c.

Calendula (Pot Marigold).—Very hardy annual, one foot high, blooming freely practically the whole year round. Is of the easiest culture, and is desirable for rather inferior soils, where less sturdy flowers do not thrive. A medicinal extract resembling arnica is made from the flowers.

Calundula (Double Mixed).—A good mixture of eight or ten different shades of yellow, some clear colors, and some shaded and striped. Pkt. 5c; oz. 15c.

California Poppy.—See Eschscholtzia.

Calliopsis.—A half hardy annual, growing about three feet high, and valuable for bright bedding effects or for cutting. Leaves are narrow and stems slender. Blossoms single and about 2 to 4 inches in diameter. Pkt. 10c.

Castor Oil Bean (Ricinus).—A half hardy annual, growing from 6 to 15 feet high and bearing large, green, deep purple and brown leaves and bright orange and scarlet flowers. The seed pods resemble a prickly fruit. Of the easiest culture. Individual plants, with plenty of room, look best.

Celosia Cristata or Cockscomb.—A half hardy annual, growing 6 to 8 inches high, bearing a wide, wavy blossom that resembles a cockscomb, in brilliant colors and fine for massing or border work. Pks. 10c.

Magnificent (Thompson's).—A new variety, superior to the older sorts, bearing grand spikes; flowers in mid-summer. Mixed. Colors have a wide range. Pkt. 10c.

Coreopsis.—A perennial with light, graceful foliage and beautiful golden flowers. Blossoms in mid-summer and is one of the best yellow cut flowers. Pkt. 10c.

## CANTERBURY BELLS

Canterbury Bells (Campanula Medium).—A hardy biennial, blooming the second year from seed, or the first year, if sown early. Of easy culture, but prefering rich, moist soil. Grows about three feet high, and bears double and single varieties of blue, white, purple and red flowers. Single Mixed, pkt. 5c; oz. 30c.

#### CANN'S CHOICE CARNATIONS

Choice Double Border.-Mixed color. Pkt. 15c.

Marguerite.—An extra vigorous race, especially adapted for out-of-door culture. The plants are trim in habit, perpetual, and flower abundantly in five months from sowing the seed. Marguerite Carnations are highly fragrant, and have beautiful double flowers.

Candytuft (Iberis).—A hardy annual, growing about 6 to 18 inches high, according to variety. The blossoms are borne on vigorously long spikes, and the newer varieties are quite large flowering and very fragrant. Of easy culture and valuable for bedding or massing.

Giant Hyacinth Flowered or Improved Empress.—Very large heads and long spikes of white flowers. An improved strain of Giant Empress and the best sort for cut flowers. Pkt. 10c; 1/4 oz. 25c; oz. 75c.

Dwarf or Tom Thumb.-White. Plant very dwarf. Pkt. 10c; oz. 30c.

### COSMOS-THE AUTUMN FLOWER.

Early Flowering Mixed. Pkt. 10c; oz. 50c. Giants of California—
Pink, Pkt. 10c; oz. 50c.
Crimson, Pkt. 10c; oz. 50c.
White, Pkt. 10c; oz. 50c.
Mixed, Pkt. 5c; oz. 35c.

#### CENTAUREA.

A hardy annual, embracing a number of species, some being grown only for their foliage. All varieties grom from 1½ to 2 feet high. Sow the seed early and transplant in March. Except the white-leaved sorts all make excellent cut flowers.

CYANUS (Bachelor's Button, or Bluebottle, or Corn Flower).—Of easy culture. Sow the seed where it is to remain and thin to three or four inches. Mixed, Pkt. 5c; oz. 25c.

Imperialis (Royal Sweet Sultan).—The finest of all Sweet Sultans; the plants are very strong and bear giant flowers on stiff, long stems; excellent for cutting and lasting, when cut, unusually well. Mixed, Pkt. 10c; ½ oz. 50c. Pure White, Pkt. 10c. Purple Shades, Pkt. 10c.

Cineraria.—A tender perennial, grown principally in the greenhouse, but can be grown safely in the garden in summer. Seed should be sown in summer, and the greenhouse requires only moderate heat. Plants grow from 1 to 2 feet high and bear clusters of large, single flowers of bright colors. Will do well in a partly shaded location. Pkt. 25c.

Cobaea Scandens.—A half hardy climbing annual, with large leaves and large bell-shaped flowers. Blossom is green until nearly grown, when it turns bright-purplish blue. Grows about 30 feet, and is very desirable for covering a large lattice. A native of Mexico. Pkt. 10c.

### COLUMBINE.

A hardy perennial, growing about two feet high and bearing an immense variety of colors on long, smooth stems.

California Hybrida.—Large, yellow flowers, orange spurs; an improvement on our native sort. Pkt. 15c.

Cypress Vine (Ipomoca Quamoclit).—A tender, climbing annual, with soft, fernlike foliage and small, starlike flowers, in red and pink, or white. Scarlet, Pkt. 5c; oz. 30c. White, Pkt. 5c; oz. 30c. Mixture of several colors, Pkt. 5c; oz. 30c.

Daisy, Shasta Daisy.—A fine perennial plant bearing large white single blossoms, with yellow centers; an excellent cut flower and admired everywhere. Soak seeds in warm water over night before sowing. Pkt. 15c.

Dianthus or Pinks.—Hardy annuals, about one foot high, and bearing beautifully colored, single and double blossoms in profusion all summer. Sow seed early in boxes and transplant, or sow in rows where the plants are to remain and thin.

Mixture of all single varieties. Pkt. 5c.

Digitalis or Foxglove.—A hardy perennial, blooming the second year from seed. Grows usually about  $3\frac{1}{2}$  feet high, although in very rich soil sometimes 6 feet. The bell-shaped flowers are borne on long spikes, and come in shades of purple, lavender, rose and white, all spotted lightly inside the blossoms. Thrives best in cool, shady locations. Fine mixed, Pkt. 5c.

## ESCHSCHOLTZIA.

Californiacus.—The bright, orange-yellow common variety. Pkt. 5c; oz. 20c; lb. \$2.25.

Burbank's Crimson Flowering. Pkt. 10c.

Rose Cardinal.—White inside, light pink outside. Pkt. 5c.

Gaillardia.—A very showy garden plant, with brilliant flowers in scarlet and yellow, blended and shaded. Blooms freely from early summer till autumn. Grows one and one-half to two feet high and the blossoms are borne on long, slender stems. Both single and double varieties are hardy.

Fine Single Mixed, Pkt. 5c.

Godetia.—A hardy annual growing from six inches to ten inches high. Of compact growth, with a profusion of satiny cup-shaped flowers in deep red, pink and white, shaded and blended. Valuable for bedding or massing. Sow seed early in the year. Small flowered deep-red variety; grows wild in California. Tall Sorts. Fine Mixed, Pkt. 5c.

Gypsophila (Baby's Breath).—A hardy annual of easy culture. Grows two to three feet high, and bears a profusion of small-star-shaped white and pink flowers.

Paniculata.—Fine for bouquets; white flowers; perennial. Pkt. 5c.

Elegans.—Annual white. Very largely grown by florists for use in bouquets. Pkt. 5c.

Helichrysum (Everlasting Flower).—A free-flowering, hardy annual, growing four to five feet high and bearing beautiful straw-like flowers in a great variety of shades and colors. The stems are long and the blossoms large. It is the best and most satisfactory of the everlasting flowers, and makes a very handsome dried bouquet. Mixed. Pkt. 5c.

#### CANN'S GORGEOUS HOLLYHOCKS

Hollyhock.—A hardy perennial of upright, stately growth, 5 to 8 feet high. The very double varieties are the most desirable, but the newer, semi-double, fringed types are also very popular.

Double Varieties .- Mixed, Pkt. 10c.

Single Varieties-Mixed. The old-fashioned blossoms in all colors. Pkt. 5c.

#### THE WONDERFUL KUDZU VINE.

Kudzu Vine (Pueraria Thumbergiana).—A new climber of great merit. This vine is one of the most rapid climbers there is, growing to 20 feet quickly. Called also Jack-and-the-Beanstalk. Hardy perennial. Pkt. 10c.

Lathyrus Latifolius (Perennial or Everlasing Pea)—A hardy perennial climber, flowering the first year if seed is sown in the fall. Leaves and stems smooth. Flowers resemble sweet peas, but are borne on strong stems, with eight to ten blossoms to the stem. It is not fragrant but is hardy and showy, and thrives in any good soil. Pink Beauty, Pkt. 5c; Crimson, Pkt. 5c. White, Pkt. 10c.

#### LARKSPUR

Hardy Annual Varieties.—These Larkspurs grow about one and one-half to two feet high. A great variety of bright colors; of easiest culture, doing well in any soil.

Emperor.—Branching. The Emperor Larkspurs are very bright showy and send up often forty or more erect spikes of double flowers; two feet. Rose pink-flowered, Pkt. 5c. White, Pkt. 5c. Mixed, fine double flowers, Pkt. 5c.

Hardy Perennial Larkspurs (Delphiniums).—These are taller than the annual sorts, and their brilliant flower spikes arrest your attention, even at a distance. The foliage is attractive and the plants strong and neat in habit. By keeping the plants well watered and the flowers cut, a second of bloom may be had, and from some a third. The seed is a little difficult to start, so we advise sowing in a box in prepared soil and under glass.

Chinese Mixed.—Large single flowers on spikes; two to three feet; the flowers

Owing to the unusual conditions at this time, prices on seeds fluctuate so often we request our customers to WRITE FOR PRICES.

#### LOBELIA.

Crystal Palace Compacta.—The variety most used for borders. Deep blue flowers and dark foliage; six inches; a constant bloomer. Pkt. 10c; ½ oz. 50c. have all the delicate shades of blue from white to deep indigo; flowers early from seed sown in the spring. Pkt. 10c.

Emperor William.—Sky-blue; compact. Pkt. 10c; 1/8 oz. 40c.

Marigold.—A hardy annual, shrubby plant, in dwarf and tall varieties, growing from six inches to three feet high. Foliage, bright green, deeply cut, and graceful. The flowers are various shades of yellow and brown. The tall varieties are very valuable for large bedding or back-ground work, and the dwarf varieties for borders.

Eldorado.—Called "The African Marigold." The best tall variety with large, very double blossoms. Mixed. Pkt. 5c.

Dwarf French, Legion of Honor-Single brown and yellow. Pkt. 5c.

Dwarf French, Striped-Pkt. 5c.

Dwarf French, Mixed-Small flowers. Pkt. 5c.

Tall French Mixture—A mixture of tall double, colors in yellow, brown and stripes. Small flowered. Mixed, Pkt. 5c.

Pot Marigold and Cape Marigold-See Calendula.

#### MIGNONETTE

Golden Machet.—A compact-growing variety, with medium long, thick spikes of yellow flowers. Pkt. 5c; oz. 50c.

## MINA LOBATA-A CLIMBER.

Mina Lobata.—A fine annual climber which grows very rapidly to a height of 20 to 30 feet in a season. Mina is one of our very best climbers, the leaves are of good size and dense, and the flowers are freely borne in clusters; orange red. Useful for arbor, trellis, etc. Pkt. of 20 seeds, 10c.

Morning Glory (Convolvolus Major. See also Ipomas).—No climber is more popular than is the Morning Glory; for covering trellises of unsightly back fences they and climbing Nasturtiums are most often planted. Morning Glories grow quickly to a vine fifteen feet long and bear very abundantly brilliant flowers, funnel-shaped, of various colors, blue predominating. Soak the seeds for two hours in warm water to hasten germination; of easy culture. See Ipomeas for Brazilian Morning Glory and for sorts not listed here.

Tall or Climbing Varieties. Mixed. Pkt. 5c; oz. 15c.

## DWARF NASTURTIUMS.

Chameleon.—Mixed. A dwarf mixture of blotched and inconstant shades on one plant; such as bronze and crimson or yellow. Pkt. 5c; oz. 20c; 1/4 lb. 60c.

#### CANN'S SUPERB PANSIES.

Giant, Mixed.—A splendid mixture of various shades and markings. The blossoms are perfectly round and are blotched at base of three to five of the petals. Pkt. 25c.

Giant Trimardeau, Mixed.—The largest flowering type of Pansies, called the French strain. The top petals are larger than the three lower ones and are beautifully marked. Pkt. 15c; oz. \$2.00.

Pentstemon.—One of our best flowers for the hardy perennial border; grows two feet high; flowers the first season from seed and blossoms freely. Pentstemon sends up spikes of bright-colored and spoteed flowers somewhat like the Foxglove, but in a great variety of shades and colors. A decidedly beautiful and satisfactory flower. Mixed, Pkt. 10c.

#### PETUNIA

A tender perennial. The large, double varieties do not produce seed, but the pollen from them is artificially crossed on the large, single and fringed plants, and the seed so produced will make a percentage of double blossoms. The Giant Flowered types are in large, single, plain edged, or fringed edge blossoms, or in very thickly double flowers.

Giant Flowered Varieties, all fertilized by hand:

Single.—Deep throated, brilliantly blotched, fringed, mixed. Pkt. 25c.

Double.-White, blotched, and brilliantly colored, mixed, plain edged. Pkt. 25c.

#### PHLOX.

Phlox Drummondii, Grandflora.—A hardy annual, growing from six inches to one foot high and bearing beautiful, soft-petaled, and brilliantly colored flowers all spring and summer. Fine for bedding and massing. Sow seed in the fall for early flowers.

#### PERENNIAL POPPIES.

Hardy annual, of easy culture; in bright, glowing colors. Blooms first year from seed.

Iceland, Mixed.—A graceful, delicate variety twelve inches tall, with white, orange and yellow single blossoms, the petals resembling crumpled tissue paper. Sow in the fall, where plants are to remain, and thin. Pkt. 10c.

Orientale (The Large Oriental Poppy).—A hardy plant, bearing large brilliant crimson flowers, with a black blotch on each plant. Very showy and attractive; two and one-half feet tall. Pkt. 10c.

Shirley.—The most beautiful type of Poppies, having soft, hairy foliage, and an immense variety of single blossoms in white, pink, lavender, purple.

Portulaca.—Low-growing or creeping tender annual, six to eight inches high and bearing glossy, cup-shaped blossoms in very brilliant and gorgeous colors. The foliage and stems are thick. The seed germinates slowly and should be started under glass or when the weather is hot. These flowers love the sunshine and do best on rather dry ground; excellent for embankments.

Single, Mixed.—Large flowering. Pkt. 5c; oz. 50c.

Double, Mixed.-Large flowering, Pkt. 10c.

Scabiosa or Mourning Bride.—Also called Sweet Scabious, or Old Maid's Pincushion, etc.—Our mannoth flowered strain of this old-fashioned flower is very beautiful and worthy of a place in every garden; the tall flowers are especially adapted for cutting and massing in the garden. Annual (self-sown in California)  $2\frac{1}{2}$  to 4 feet high. These new flowers are double clear to the center, covering the thimble-shaped cone.

Mammoth Flowered, Double, or Maxima.—Mixed. An improved strain, with large petals and beautiful colors. Pkt. 5c.

Snail Vine (Phaseolus Caracalla).—The flowers of this perennial climber are coiled so as to resemble a snail shell, whence the name. The flowers are fragrant and cf a buff yellow and light purple color. Grows to a height of twenty feet, and is a good climber. Pkt. 10c.

Statice Sinuata (Sea Lavender).—A blue everlasting flower much used by florists for winter bouquets. Annual, two to three feet. Each floweret is small, but the plant is very effective. Pkt. 5c.

Salpiglosis.—A half hardy annual, growing about three feet high and bearing trumpet-shaped blossoms of rich shades and colors, all beautifully veined. It is valuable for bedding and massing, and its long stems make it excellent also for cut flowers. Sow seed early in the year, and transplant, or sow the seed where it is to remain in April, and thin to six or eight inches, enrich the soil. Mixed. Pkt. 5c.

Salvia or Flowering Sage.—A tender perennial, blooming the first season from seed and growing two to three feet high. The blossoms are borne on long stems in racemes or spikes, and are fragrant. The plant forms a bunch and blooms profusely during the whole summer and fall.

Splendens.—Bright scarlet flowers. Pkt. 10c.

Bonfire.—A new dwarf Scarlet Sage, of dense, compact growth, from 20 to 24 inches high; useful for bedding or borders. Flowers dark scarlet on spikes which stand clear of the foliage and attract attention at once. Pkt. 10c.

Snapdragon (Antirrhinum).—A half hard perennial, growing from 1½ to 3 feet tall. Flowers are oddly shaped and apparently closed, but by pressing the sides together can be made to open like a dog's mouth. The newer strains are large flowered and contained in a greater number of shades and colors. Their rich spikes are beautiful for cutting and keep fresh for a long time. Very easily raised.

Giant Flowered.-Mixed. Pkt. 10c.

Tom Thumb or Dwraf. Pkt. 5c. Mixed, Pkt. 10c.

Giant Perfection.—An early Ten Weeks' Stocks, with tall spikes of large, very double flowers. This Stock branches into a pyramidal form and is two feet tall. Mixed, Pkt. 10c.

Sunflower (Helianthus).—Hardy annuals, growing from three to six feet high. Of the easiest culture and suitable for a stately row or background, or even for bedding. Plant when the ground is well warmed in light or sandy soil.

Chrysanthemum Flowered.—Large, densely double, bright golden flowers. The plant branches and affords fine, long, stout stems for cutting. This is the best variety in existence; 6 to 8 feet. Pkt. 5c; oz. 25c.

Cucumerifolius Perkeo (Miniature Sunflower).—The Cucumerifolius Sunflowers are small both in flower and plant and are often called Cut and Come Again Sunflowers. Perkeo is only two feet tall, but is covered with small (three-inch) golden yellow flowers with a dark eye. Pkt. 10c.

Sweet William (Dianthus Barbatus).—A hardy perennial, blooming the second year from seed. Grows one to two feet high and carries its flowers in clusters at the end of a stiff stem. The individual flowers are handsomely colored and marked. It makes a beautiful bedding plant and is of easy culture.

Single Varieties-Mixed. More attractive than the double. Pkt. 5c; oz. 25c.

Double Varieties-Mixed. Pkt. 10c.

Mixed, all varieties. Pkt. 10c.

Verbena.—A half hardy trailing perennial of easy culture. While it grows readily from division of the root or from cuttings, it does best from seed. It is well known as a bedding or border plant, and the improved large flowered and fragrant strains make it a handsome cut flower for low vases.

Mammoth Flowered.—Mixed. Pkt. 10c; 1/4 oz. 35c; oz. \$1.25.

Pink Shades.—Mammoth strains of rose and pink shades. Pkt. 10c;  $\frac{1}{4}$  oz. 35c; oz. \$1.25.

Pure White.—Mammoth strains. Pkt. 10c; 1/4 oz. 35c; oz. \$1.25.

Purple and Blue Shades .- Mammoth strains. Pkt. 10c.

Scartel Defiance.—Brilliant scarlet. Pkt. 10c.

Extra Selected Mammoth Strain.-Mixed. Pkt. 15c.

Hybrida Gigantea.—New giant auricula-flowered Verbena in new and beautiful shades. Pkt. 30c.

#### ZINNIAS-VERY POPULAR.

One of the most brilliant and showy annuals and has long been a general favorite. The seed can be sown early in the hot bed and transplanted or sown later in the open ground. They come in flower early in the summer and keep on blooming until frost. 10c Pkt. mixed.

#### CANN'S SWEET PEAS.

Dorothy Eckford.—White seeded, large shell shaped. Oz. 20c; 1/4 lb. 50c.

Primrose Spencer.—Morse's Extra select strain. The finest of its class, clear primrose color, fine large wavy standard and wings; white seeded. Per Pkt. 10c; oz. 50c.

Morse's Pure White Spencer.—Re-selected, a superior strain of the very finest Spencer. Can be used as the best waved white, no matter under what name. Per Pkt. 10c: oz. 50c.

Dainty Spencer.—Very large Spencer, white, with rose-pink edges. Per Pkt. 15c.

Lovely Spencer.—A Spencer type with the lovely color combinations. Per Pkt. 10c; oz. 35c.

Apple Blossom Spencer.—Very large, standard very bright rose, wings primrose with a flush of rose tint. Pkt. 10c; oz. 35c.

Queen Alexandra or Improved Scarlet Gem.—The nearest approach to a true scarlet. Oz. 25c.

King Edward Spencer.—The best pure red Spencer; very large, with especially immense wings. Per Pkt. 10c; oz. 35c.

Lady Grisel Hamilton (Improved Countess of Radnor).—Soft lavender, tinted with mauve in standard. Oz. 20c.

Ast Ohn.—The very best lavender Spencer. Is more truly a soft pinkish lavender self. Very large and wavy. Per Pkt. 10c; oz. 35c.

Flora Norton Spencer.—This variety is more truly a Unwin in size, but is nicely waved. Bright blue with tint of purple. Per Pkt. 10c; oz. 35c.

Emily Eckford Spencer.—A good Spencer of bluish purple, similar in shade to grandiflora variety of this name. Per Pkt. 15c.

Tennant Spencer.—A giant Spencer, rosy purple self. The very best variety of this shade. Per Pkt. 10c.

Phenomenal.—A large, fluffy variety, called orchid flowering; white ground shaded with blue and lavender, edge of blue. Pkt. 10c.

Othello Spencer.—Of immense size, with large drooping wings and large wavy standard. Deep rich maroon, very dark and adapted for many attractive combinations. Per Pkt. 10c;  $\frac{1}{2}$  oz. 20c.

#### CUPID SWEET PEAS.

These are low-growing or dwarf Sweet Peas, about one foot high and spreading to about two feet in diameter. The foliage is dark green and the stems are short, usually from three to six inches long. The blossoms, however, are larger than those of the tall varieties.

White.—Pure white. Pkt. 10c; oz. 35c; 1/4 lb. \$1.00; 1 lb. \$3.25.

Pink.—Color of Earliest of all. Pkt. 10c; oz. 35c; 1/4 lb. \$1.00; 1 lb. \$3.25.

Mixture of All Varieties, including those listed and many more besides. Pkt. 5c; oz. 35c; 1/4 lb. \$1.00; lb. \$3.50.

#### NURSERY DEPARTMENT.

Customers will please remember that when our busy season commences we are rushed with orders, and it may be a few days before their orders receive attention; but they may rest assured that there will be no unnecessary delay in shipping. Prices quoted herein are f. o. b. Nurseries, and cancel all previous quotations.

Packing.—Sufficient money should be added to remittance to cover cost of boxing, etc. Say ten per cent. of purchase.

Guarantee.—We do not guarantee stock to live, nor will we replace free of cost that which dies or fails to grow; nor can we, in view of the various incidents that the stock is subject to, as the success, or failure depends largely on climatic conditions. manner of planting, after care, etc. We do guarantee, however, that our stock will be in a good, live and healthy condition upon departure from our nurseries.

Substitution.—Where particular varieties are ordered and particular ages and sizes of trees, kinds of stock, etc., it should be stated whether and to what extent substitution will be allowed in case the order cannot be filled to the letter. Where no instructions in this respect accompany the order, we shall feel at liberty to substitute other varieties as nearly similar as possible. If the selection of varieties is left entirely to us, we shall endeavor to send only such sorts as are acknowledged to give general satisfaction.

As Usual, 5 will be furnished at 10 rates; 50 at 100 rates; 500 at 1000 rates.

Claims.—Should any errors occur we desire to be informed upon receipt of goods, in order that we may rectify them without delay. All claims must be filed within ten days after the arrival of the shipments.

Arthur Cann gives no warranty, express or implied, as to description, purity, productiveness, or any other matter of any seeds, plants or trees he sends out, and will be in no way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

#### HOW TO GROW ROSES.

December, January, February and March are the best months, but should the season be favorable, and with a little extra care, you can still plant during the early part of April. The plants sent during those months are what we call dormant two-year-old plants, and average from one and a half to two and a half feet in height, and are taken up without soil around the roots, and are packed in damp moss. Should the purchaser be unable to plant them immediately, they will take no harm to remain in the packing for a few days, or they can be opened up and "heeled" in the ground until ready to set out. The bushes sent out are already pruned. Planters should be careful to keep all suckers (if any) from BELOW the bud, cut away, otherwise the stock outgrows the rosebud itself.

Roses give the best results when planted in good, heavy soil, to which may be added some good old stable manure, but remember that it ought to be well decayed. Under no circumstances use FRESH or new manure. After the hole is about three-quarters filled with soil, give some water to settle the earth around the roots; then put the remaining soil into the hole. This is usually enough water to give during the winter, provided we have not a long, dry period; in that case the plants should get another watering at regular intervals. They will commence to bloom the first season after planting, in May or June, and if properly treated, will give an abundance of flowers the first season. After the blooms are past, we advise you to cut the old flowers off; this treatment induces them to make new growth, from which you will obtain your next crop. To aid them at that time, keep them freely watered, and by so doing you can have flowers away in December.

#### PRUNING.

A few remarks on this important point are now necessary. This should be done during the months of January and February; at that time the bushes are in a dormant condition. The "Teas" or Ever-blooming varieties, require to be more severely pruned than any other sort, as they are the strongest growers. Cut back to about six or seven inches from the old wood, thinning out all weak wood and leaving about five or six shoots, according to size of plant; apply the same method that the orchardist does to his fruit trees, and you will be about right. The idea is not to leave too much wood on the plant. If you follow this method you will have large Roses with long stems. If you fail in pruning and thinning out, you have a plethora of small blooms.

THE HYBRID TEAS should have almost as much pruning done to them as the TEAS.

HYBRID PERPETUAL sorts, not being such strong growers nor making so much wood as the preceding, do not require so much pruning.

NOISETTE or CHAMPNEY varieties being all climbers, and strong, rampant growers, are not usually pruned as their duties are to cover certain objects. They should, however, be periodically thinned out.

BOURBON sorts should be pruned according to the growth they have made.

MOSS ROSES require little pruning, as they usually make only a few shoots in a season. Just cut back to keep the plants in shape.

## ROSES-GENERAL COLLECTION.

25c Each—or 6 for \$1.25, except where noted—2-year-old.

General Jacqueminot.—Hybrid perpetual. An old popular variety; color brilliant crimson; large and effective.

Gruss An Teplitz.—Hybrid Tea. The reddest rose, fiery scarlet shading to velvety crimson; blooms most profusely, and the mass of color produced is simply wonderful; grows free and vigorous, sending out long clean shoots, covered with beautiful foliage, of a bronzy plum color; no better bedding Rose.

Harry Kirk.—A magnificent addition to the none-too-long list of yellow Roses. The flower is much the same form as the well-known Killarney, but of a lovely deep sulphur yellow, becoming lighter at the edges of the petals. The buds are simply perfection in form. Petals very broad, smooth and rounded.

Kaiserin Augusta Victoria.—Hybrid Tea. Pure\*ivory white; the grandest of all white Roses; is a strong grower, producing buds and flowers of enormous size; a grand garden Rose, and the finest of all for cut flowers; no lover of Roses can afford to be without it.

Marie Van Houtte.—Ever-blooming Tea. For outdoor culture this beautiful Rose can not be excelled by any of its color; the flowers are large and full, the color pale yellow shading to creamy white, and tinged with pale rose; bush is a sturdy grower and a free bloomer.

Paul Neyron.—The largest rose in cultivation. Flowers are enormous size, with long, sturdy shoots, usually one flower to a stem. Rich dark rose in color, and very fragrant.

Perie De Or.—A fac simile of Madame Cecil Brunner in every sense of the word except in color—Nankeen yellow with a deep orange yellow center. One of the prettiest of the small flowered polyantha Roses.

Perle Des Jardns.—Ever-blooming Tea. (Pearl of the Garden). This grand old Rose still maintains its popularity and is known as one of the best of its color; the flowers are large and full; clear golden yellow; succeeds in open ground.

Pink Madame Cochet.—Deep rose pink, unsurpassed for lasting qualities. Now grown by thousands as a commercial cut flower.

Ulrich Brunner.—Hybrid perpetual. One of the grandest hardy Roses; color a brilliant cherry red, a very effective color; flowers of fine form and finish, borne on strong stems nearly thornless; petals of great substance; plant hardy and vigorous; a free bloomer.

White Maman Cochet.—Ever-blooming Tea. This grand Rose has proven to be the very best of white bedders; flowers usually large, round and full; pure white with sometimes a faint tinge of pale blush. Has the same freedom of bloom as the Pink Cochet, and the same habit of growth. One of the very best for cut flowers.

Captain Christy.—Delicate flesh color, rosy center, flowers extra large. Double, full and sweetly scented.

Dorothy Page Roberts.—A grand novelty in every sense of the word, with large, full blooms and long pointed buds. Foliage heavy and leathery in texture. A free-blooming and in all respects a highly recommended variety. 50c each.

FRAU KARL DRUSCHKI.—Hybrid perpetual This new hardy white Rose is unquestionably the best of its class and color. The plant is remarkably handsome with its bright, heavy foliage and strong upright growth. The flowers are perfect in form and snow-white in color, with large, shell-shaped petals.

Mrs. John Laing—Hybrid perpetual. Exceedingly fragrant and a free bloomer; flowers a delicate pink, and of beautiful form.

Madame Leon Paine.—Lovely silvery pink shaded with salmon. It produces lavish quantities of flowers throughout the entire season. We consider it an indispensable variety to any collection of Roses.

La France.—Introduced in the early seventies and never surpassed in color. A glistening pink.

Madame Abel Chatenay.—Produces a mass of salmon pink blooms and is especially useful as a winter bloomer. Last a long time after being cut.

Madame Caroline Testout.—Hybrid Tea. Clear, bright Rose, very sweet; flowers large and double, resembling La France, but more sturdy habit; very free flowering; one of the very best.

Madame Cecil Brunner.—Polyantha. An elegant little Rose; rosy pink shaded to bright salmon in the center; borne in large, open clusters; a perfect little gem.

White Killarney.—Hybrid Tea. The counterpaart of Killarney, of which it is a sport. It shows the same vigorous habit of growth. The buds are long, large and snow-white.

Yellow Baby.-New canary yellow.

Betty.—A ruddy gold overspread with golden yellow. Flowers large. Fairly double, fine form. Buds very long and pointed, and very large petals. Deliciously perfumed. Plants, 50c each.

Hugh Dickson.—Hybrid perpetual. A vigorous free grower and perpetual bloomer; fine foliage; color a rich brilliaant crimson; very sweetly scented. Plants, 50c each.

Improved Rainbow.—Ever-blooming Tea. The habit of growth and form of the flower are similar to Papa Gontier; color pink, striped crimson, center amber; a pretty Rose.

Lyon Rose.—Without any question the grandest introduction in Roses for many years; an entirely new color, and combining all the good qualities to be sought for in a Rose. It is a strong, vigorous grower, with every shoot crowned with magnificent blooms. In general form the bloom might be likened to a highly perfected Madame Caroline Testout, with a more double makeup of flower. The color is simply superb, being a delightful shrimp pink, shaded with coral pink, and gradually merging to deep golden yellow, at the base of the petals. Plants, 50c each.

Lady Battersea.—A strikingly beautiful new Rose, with long pointed buds of excellent form. Cherry crimson in color, becoming much darker in fall and winter. Long, stiff stems. Very fine. Plants, 50c each.

Mrs. Aaron Ward.—Hybrid Tea. Deep golden orange color, shading out to lemon or creamy yellow at the end of the petals. The buds are cupped and very deep, showing the glowing heart to the best advantage; flowers large, full and exquisitely formed. Plants, 35c each.

The Ophelia Rose.—The Ophelia Rose is perhaps the loveliest of all the goldenyellow Roses. It is of medium size, the outside petals of the full-blown Rose being of a beautiful delicate yellowish tint shading towards a pale pink in the center. It has a rare and lasting fragrance and will prove a valuable addition to any Rose garden. Fine two-year-old field grown stock, now ready for immediate delivery. Each 50c, 12 for \$5.00.

Mrs. George C. Waud.—A very fragrant new red Rose, with large, full blooms and long, high-pointed petals. Foliage heavy and leathery in texture. A free blooming and in all respects a highly recommendable variety. Plants, 50c each.

Peace.—One of the loveliest of all Tea Roses. The color is a delightful lemon yellow, buds of medium length, expanding into a large broad-petaled flower of great beauty. It is as free in production as Marie Von Houttee, and when better known will occupy a premier position among our leading Tea Roses. Very vigorous. Plants, 35c each.

#### CANN'S CLIMBING ROSES.

Climbing Perle Des Jardins.—Habit of growth is vigorous, young plants often sending up shoots six to eight inches in one season, with rich, glossy foliage and bright red stems. The flowers are produced in profusion and are deep canary yellow. 35c each.

Marchal Neil.—Ever-blooming Tea. The buds and flowers of this Rose are superb; extra large, double and exquisitely perfumed; the color is a deep golden yellow; blooms very freely; throughout the South and West it attains a degree of perfection seldom

seen in any Rose. 25c each.

Madame Cecil Brunner.—We can recommend this variety to everyone who grows Roses. The blooms are exactly the same as the non-climbing variety of the same name. Extremely vigorous. 35c each.

Pink Cherokee.—Rosa Leavigata, var. Anemone. While it is some years since this variety was introduced, its popularity has not waned. The flowers are a lovely salmon rose with a circle of golden stamens. When in bloom during the spring and fall it presents a display unapproachable for delightful freshness and rosy fragrance. It may be used effectively by planting alternately with the well known White Cherokee, and the new Red Cherokee, "Ramona." 25c each.

William Allen Richardson.—Fine orange yellow, apricot center. A beautiful climber with a profusion of large flowering trusses. 25c each.

Reve D'or.—Ever-blooming Tea. The best climbing Rose in its color and always in demand. The flowers are a beautiful shade of buff and apricot; blooms freely during the spring and summer. 35c each.

Glorie De Margottin.—A handsome climbing red Rose, many shades deeper than the well-known Henrietta. Vigorous in growth, with fine, heavy foliage. 25c each.

Papa Gontier.—Ever-blooming Tea. Originated recently in California. The flowers are identical in color, form and fragrance with the bush Papa Gontier. It is a good climber and a constant bloomer. A splendid addition to the list of climbing Roses. 25c each.

La Marque.—Ever-blooming Tea. Color white, beautiful buds, large, full flowers, double and sweet; very popular. 25c each.

Climbing Caroline Testout.—Hybrid Tea. A sport from the bush of the same name; bloom identical with its parent. The color is a solid cerise pink and does not fade. The bloom is large and fragrant. 25c each.

Climbing Kaiserin.—Hybrid Tea. (Mrs Robert Peary). This is without doubt the grandest of all white climbing Roses; of splendid substance; large, full, deep and double; it is one of the strongest growing, freest blooming and all around the most satisfactory white climber. 35c each.

Gold of Ophir.—Salmon yellow shaded with bright deep rose. An excellent Rose and profuse bloomer.

Alfred Carrier.—One of the most vigorous growers and profuse bloomers. Color pure white with large trusses. Blooms throughout the early spring and summer. 35c each.

Belle Seibrecht.—Hybrid Tea. The flowers are large, exceedingly graceful, full and double; buds long and pointed; color is a brilliant rich, deep pink.

Mme. Edouard Herriott.—Hybrid Tea. The "Daily Mail" Rose, so deservedly popular. Produces a profusion of exquisitely formed and sweetly scented buds of reddish copper and coral tints. Without exception the most sensational colorings ever combined in one Rose. Our most popular seller. 75c each.

Old Gold.—Hybrid Tea. Another of the Gold Medal Roses, with dark coppery foliage which is a distinct contrast to the vivid rich orange and coppery red tints of the flowers. A perfect gem for either bedding or cut flowers, the bloom standing up well either cut or on the bush. A most remarkable Rose. 75c each.

Juliet.—Hybrid Brier. A distinct Rose; outer side of petals old gold: inside, rich red; large, full and handsome; deliciously fragrant; free and constant bloomer. 75c each.

Sunburst.—Hybrid Tea. During the last few seasons all attempts to keep up with the demand for this magnificent new Rose have failed. One of the best yellow Roses

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ever produced; color intense shade of golden orange and yellow, brilliant in effect; buds large and well formed; produced on long stems. Its name typifies its glorious colorings which are unapproachable in effect. 50c each.

American Beauty.—Hybrid perpetual. A rich rosy crimson, unsurpassed in beauty and fragrance. The varieties of this class are not as a rule, ever-blooming, yet this grand Rose will, with proper care, bloom throughout the summer.

General McArthur.—Hybrid Tea. One of the very best of all red Roses; of remarkably strong growth and good habit; blooms continuously and profusely; flowers are large and very fragrant; the bud and open flower are brightest crimson and retain their coloring until they drop their petals.

Helen Gould.—Hybrid Tea. This is a most beautiful and satisfactory Rose for outdoor culture; it is a cross between Kaiserin and Testout and possesses many of the good qualities of both; color bright glowing carmine; bud long and elegantly pointed, full and perfectly double; fine grower and constant bloomer. 30c each.

Maman Cochet.—Ever-blooming Tea. One of the most wonderful of Roses; clear rich pink; large, full and of perfect form; free blooming, every shoot being crowned with a flower bud; a vigorous grower with handsome foliage; suitable for bedding, garden decorations or cut flowers. We recommend this Rose with every confidence to all Rose growers.

Papa Gontier.—Ever-blooming Tea. This is probably the most popular red Rose in the whole list; the bush, which is of strong growth and always furnished with an abundance of healthy foliage, is an incessant bloomer; it is much sought after for cut flowers on account of its magnificent buds; color, rich cherry red; no collection is complete without it.

Persian Yellow.—Briar. T. The old-fashioned variety; an intense yellow; very hardy.

Rhea Red.—Hybrid Tea. The blooms of this handsome Rose are large, double, and exquisitely fragrant; color is a rich dark, velvety red; free blooming; a variety of real meirt, and one that should find a place in every rosarian's collection. 30c each.

Viscountess Folkstone.—Hybrid Tea. Very fine, large, splendidly formed and of fine substance; color a creamy pink; bush a very strong grower and a constant bloomer; one of the very best garden varieties.

Cherokee—Rosa Sinica.—A splendid sort for covering verandas, arbors, etc.; its leaves are smooth and glossy as if varnished; highly ornamental at all times, but particularly so when covered with large snow-white single blossoms adorned with their fluffy golden yellow stamens; makes a fine defensive hedge.

Climbing Wooton.—Hybrid Tea. A sport from Souvenir de Wooton, and is identical with it except that it is a stronger grower; blooms in great profusion; color bright magenta, passing to violet crimson. We highly recommend the red climbing Rose as one of the best in its class. Well worthy of cultivation in any situation where a vigorous growing climber is desired. 30c each.

Dorothy Perkins.—Wichuriana. Noted for its hardiness and vigorous habit of growth, beautiful color and freedom of bloom; the flowers are borne in large clusters; a beautiful shell pink color, which lasts a long time without fading; this variety is suitable for situations where a trailing Rose is desired, or can be trained over arches or other supports.

Reine Marie Henriette.—Hybrid Tea. Brilliant cherry red; very large and very double; an old variety that will always be popular.

White Banksia—A rapid-growing, thornless climbing Rose; flowers small, pure white; blooms in great profusion in early spring; as the flowers are produced on the old growth, they should be pruned very little.

Yellow Banksia—Identical with the above, excepting in color, which is a fine, clear yellow.

#### 12 CHOICE CARNATIONS \$1.00

Alma Ward. A very good white.

Dorothy Gordon. A very fine rose pink variety.

Enchantress. The largest flowered Carnation grown; flowers 3 inches across; color an exquisite shade of daybreak pink.

White Enchantress. Similar to the above variety in habit; color white.

Rose Pink Enchantress. Color rose pink.

Victory. A standard scarlet Carnation, in much esteem on account of its all around good qualities.

Harlowarden. A very large, extremely full flower, deeply fringed and very fragrant, In color a fine crimson, a little lighter in color than Governor Roosevelt, and much freer in bloom than that variety. Stems long, and stiff enough to carry the flowers very nicely.

#### CANN'S BEST CHRYSANTHEMUMS

Best Flowering Varieties 12 for \$1.00-Postpaid

#### WHITE VARIETIES

Queen-A very fine silvery white. Early.

Nevius-An early white: reflexed, medium sized flower.

Mrs. Robinson-Incurved; mid-season; very good keeping qualities.

Mrs. Robinson-White, incurved, mid-season, excellent keeping qualities.

Jennie Noonan-White, incurved, and mid-season. Good keeping qualities,

Early Frost-New 1915. 15c each.

Crystal Gem-New 1916. 15c each.

Alice Day-New 1916. 25c each.

October Queen-New 1916. 25c each.

Oconto-\$1.00 per dozen.

White Chieftain-New 1916. 15c each.

October Frost-\$1.00 per dozen.

Smith Idol-\$1.00 per dozen.

Turner-\$1.00 per dozen.

Autocrat-New 1916. 25c each.

Sarubo Queen-New 1916. 25c each.

#### PINK VARIETIES

Dr. Englehardt-Incurved pink, mid-season; very good.

Mrs. J. K. Shaw-A very beautiful pink variety.

Wm. Duckham-One of the best pinks in cultivation.

Early Rose-\$1.00 per dozen.

Unaka-25c each.

Helen Frick-\$1.00 per dozen.

#### YELLOW VARIETIES

Major Bonnafon-The well-known incurved yellow. One of the best yellows. Splendid keeper. Large size.

Col. Appleton—A very large yellow; late; a good keeper.

Golden Queen-15c each.

Chryslora-\$1.00 per dozen.

Tiger-New 1916. 25c each.

Mari Gold—New 1915. 15c each. Yellow Turner—New 1916. 25c each. Golden Horest—New 1916. 25c each. Monrova—\$1.00 per dozen. Crocus—\$1.00 per dozen. B. B. Pulling—New 1915. 15c each.

#### RED VARIETIES

Crimson King—A very fine red.

Prices on the above varieties: 10c each, \$1.00 per dozen, for well-rooted plants. Ready for delivery March 15th.

O. P. Bassett-\$1.00 per dozen.

#### BRONZE VARIETIES

Mrs. O. H. Kahn—\$1.00 per dozen. Glen View—\$1.00 per dozen. Tekonsha—New 1915. 15c each. Calumet—New 1915. 15c each.

#### POMPON VARIETIES

Golden West—\$1.00 per dozen. Golden Climax—\$1.00 per dozen. Sarubo Yellow—\$1.00 per dozen. Donald Pink—\$1.00 per dozen. Japan Pink—\$1.00 per dozen. Mary White—\$1.00 per dozen.

## READY FOR MARCH DELIVERY

#### GLADIOLI

This class is very tall and erect, often four or five feet high, with spikes of bloom two feet long. The flowers are of great substance and of gigantic size, frequently seven to nine inches across, and with a great variety of colors.

America—A very popular sort and most deservedly so. The flowers are a soft lavender pink or a light flesh pink with a lavender tint; the blossoms all face one way and are very large. Each 5c; doz. 50c.

Mrs. Francis King—A lovely light scarlet; the flowers are unusually well arranged. Each 5c; doz. 50c.

Princeps—A large wide-open, very handsome flower, like an amaryllis. A rich crimson with broad white blotches across the lower petal. Each 10c; doz. 75c. (If wanted by mail, add 8c per dozen for postage.)

### BEGONIAS-TUBEROUS ROOTED

For January and February delivery. Splendid pot plants and equally useful for bedding purposes; very free flowering, doing best with partial shade. (Prices include postage). We offer Begonias in the following colors:

Dark rose, light pink, salmon, scarlet, white and yellow.

Double—All colors, separate or mixed. 15c each; \$1.50 per dozen.

Single—All colors, separate or mixed. 10c each; \$1.00 per dozen.

Owing to the unusual conditions at this time, prices on seeds fluctuate so often we request our customers to WRITE FOR PRICES.

## CLIMBING AND TRAILING PLANTS

Australian Pea Vine—This lovely fast-growing climber we can recommend to those desiring a rapid grower. The flowers are pea-shaped, pink, and produced in great luxuriance. Pot-grown strong plants, 20c and 35c each.

Ampelopsis Quinquefolia (Virginia Creeper)—The leaves are palmate, handsome and luxuriant, assuming in autumn a gorgeous bronzy hue. 35c and 50c each.

Ampelopsis Veitchii (Boston or Japan Ivy)—This variety clings closely without any assistance to a stone wall or brick flue. 35c and 50c each.

Bougainvillea Sanderiana—These climbers are becoming greater favorites every year. They have peculiarly shaped flowers, somewhat resembling the leaves in shape, the color being a rosy lake, and produced at the end of the branches in wonderful profusion. They are indispensable for the greenhouse and do remarkably well in many protected situations out of doors. Strong plants 75c and up.

Bignonia Grandiflora (Trumpet Vine)—Rapid-growing climber, bearing large orange-yellow trumpet-shaped flowers in great profusion. Strong plants 75c each.

Bignonia Radicans—Scarlet trumpet flowers; exceedingly showy. 75c each.

Ficus Repens—A very pretty useful climber, clings to stone, brick or wood, like the Boston Ivy. Evergreen. 25c each.

Honeysuckle, Chinese-Rosy white. 4-inch pots, 35c each.

Honeysuckle, Belgian or English—Red and yellow flowers; long bloomer; very fragrant. 4-inch pots, 35c each.

Hops (Humulus Lupulus)—One of the very best climbers for covering unsightly places. It is a rapid grower and bears a profusion of seed pods suitable for many purposes. Strong roots, 10c each; 75c per 12.

Ivy, English, Large-leaved—Leaves thick, shining, leathery. 25c each.

Kudzu Vine—A lovely climber, recently introduced from Japan; of very rapid growth covering walls, fences, trellis, in a short time; flower bean-shaped, chocolate shading to pink. 25c each.

Muehlenbeckia Complexa (New Zealand Mattress Vine)—This pretty, strong-growing climber and trailer is very desirable for covering old stumps of trees, rockwork, etc. The foliage is small, dense and graceful. 4-inch pots, 40c each.

Passion Vine (Passaflora)—These well-known hardy climbers are familiar to and appreciated by all. They are of rapid growth, and very attractive when covered with their large, handsome flowers. 25c each.

Plumbago Capensis—Can be trained as a bush or climber. Flowers light sky blue, verbena-shaped, produced throughout the entire summer; stands drought and water, and the brightest sunshine. 25c each.

Smilax-10c each.

## THE CLIMBING WISTARIA

There is no climbing plant that is so universally admired and generally known as the Wistaria. When in blcom in spring time they are certainly very beautiful. Their long grape-like clusters of flowers appeal to everyone. Their growth is extremely rapid, attaining a height of 40 feet in a few years. The Wistaria is vrey hardy, growing in cold countries to perfection. We offer the following variety:

Chinensis—Clusters about a foot long; flowers single, pale blue. Field-grown plants \$1.00 each.

#### HERBACEOUS PERENNIALS

Delphinium (Larkspur)—A remarkably showy class of tall growing plants, producing magnificent spikes of blue flowers in summer. Extremely satisfactory. 25c each.

Gaillardia Grandiflora—The brightest of all Gaillardias. Flowers bronze scarlet, bordered with golden yellow, three inches in diameter, produced on long stems. 15c each; \$1.00 per 12.

Shasta Daisy (Alaska)—An improvement on Mr. Burbank's original Shasta Daisy. The flowers are very large, borne on long stems and very free in bloom. Single white, with yellow center. A most satisfactory perennial. 10c each; \$1.00 per dozen.

#### MISCELLANEOUS PLANTS

Ageratum. Blue.—A lovely bedding plant; produces blue flowers for a long period. 50c per 12; \$3.50 per 100.

Aster, Semple's New Branching.—Crimson, lavender, pink and white. Ready about April 15th. 30c per dozen; \$2.00 per 100.

Cosmos—Crimson, pink, white and yellow. Ready about April 15th. 30c per dozen; \$1.50 per 100.

Daisies-Double, all colors. 25c per dozen; \$2.00 per 100.

Hydrangea Hortensis—This plant is a most satisfactory one, blooming as it does for such a long period; they succeed admirably when planted in a shady place in the garden. 25c, 35c and 50c each.

Hollyhock—Fine selection. 20c each; \$2.00 per 12.

Lavender Plants-Strong plants. 10c and 15c each.

Lobelia-Dwarf blue. Ready April 15th. 30c per doz.; \$2.50 per 100.

Mesembryanthemum—These are much used for bedding purposes and planting on banks and hillsides where there is a scarcity of water. Perhaps the showiest of them all is the one which produces the large, single pink flowers. 50c per dozen; \$3.00 per 100.

Marguerite. White-50c per dozen.

Marguerite. Yellow-50c per dozen.

Pansies—The plants include almost every shade of color, exquisitely spotted and blotched, veined, mottled and margined. 25c per dozen.

Petunia, Single-Ready March 15th. 75c per dozen.

Begonia Vernon—This variety grows about eighteen inches high. The foliage in the sun turns deep olive green, shaded and edged with bronze purple; the flowers are bright red in color, magnificently set off by abundant dark foliage. 10c each; \$1.00 per dozen.

Herbaceous Paeonies—These grand perennials are among the showiest and most useful plants, and are becoming popular with the public. Six distinct varieties. 35c each; \$3.00 per 10.

Verbena, Mammoth—The flowers are very large, of brilliant colors, and have large, distinct eyes. All colors. Ready in March. 35c per dozen.

Petunia, Double-Large pink. 3-inch pots, 20c each; \$2.00 per 12.

Santolina—A beautiful border plant; foliage silvery gray; stands trimming well. 50c per 12; \$3.50 per 100.

Salvia Splendens—Scarlet flowers; continuous bloomers. Ready in March. 10c each; 50c per dozen.

Sea Pink (Armeria)—Very dwarf, requiring no trimming. Flowers rose-pink. 40c per dozen; \$2.50 per 100.

## TABLE RAISINS AND GRAPES-Price 20c each

California Black-The well-known Mission Grape.

Cornichon Black—Berries very large, oblong, covered with beautiful bloom; skin rather thick and dark. A good shipping sort.

Flame Tokay—A magnificent large red Grape.

Muscat of Alexandria—Bunches and berries large, pale amber. One of the best for raisins.

Rose of Peru—Very large bunches; berries rounding, brownish black. One of the best for table.

Thompson's Seedless—Vine an enormous bearer and very rapid grower; bunches very large; berries greenish-yellow, firm, oval, seedless, skin thin, much larger than the Sultana. The raisins are of a very superior quality, and are in good demand. A valuable shipping Grape, ripening in July.

Isabella—Our most extensively planted Eastern Grape; bunches long, large and loose; berries black, oval, juicy and sweet with distinct musky flavor; an immense bearer; a valuable market variety.

Niagara—Bunch large, uniform, very compact; berry large, mostly round, light greenish white, slightly ambered in the sun; peculiar flavor and aroma; enormously productive

#### CURRANTS

Trim out the old wood as soon as it begins to decline, and shorten all the young shoots, to keep the bushes in good shape. Sprinkle ashes around the roots occasionally, to keep the borers away.

Strong, two years old, 20c each.

Black Naples-Berries large and black.

Cherry Currant-Very large, deep red. One of the best.

#### RASPBERRIES

Plant in rows 5 to 6 feet apart, 2 to 4 feet in the row. Cut the tops off within a few inches of the ground when planted. After the fruit season cut out all the old wood which bore the last crop of fruit. Pinch the vigorous young shoots several times during the summer. They will then grow stout enough to stand without staking.

Cuthbert—The largest, handsomest and best red Raspberry cultivated. Bears transportation well. Very productive. 60c per 10.

Superlative—A very fine new variety, said to be of superior quality. Following is introducer's description: The Superlative is acme of perfection in the Raspberry family. Has hardy and healthy growth. Fruit largest of any variety. Very prolific. Core is small, flesh very deep, seeds very small. Fruit does not fall from plant when ripe. Is a very heavy cropper. 25c each.

#### GOOSEBERRIES

We can supply the following English sorts. Large fruiting and of delicious flavor. 2-year-old plants, 20c each.

Crown Bob—Large, roundish, oval, red, hairy, of first quality.

Industry—Dark red; very large.

Lancashire Lad—This splendid sort is of superior quality, almost as large as Industry, having a rich, pleasant flavor when ripe; color rich dark red; a vigorous grower.

## THE LOGANBERRY

(RASPBERRY-BLACKBERRY)

The fruit is as large as the largest-sized Blackberry; is of the same shape, with globules similar to that fruit. Color, when fully ripe, a dark rich red. It partakes of both flavors of the Raspberry and the Blackberry, being a combination of the two mixed; a very pleasant, mild, vinous flavor, delightful to the taste, not found in any other fruit, but peculiar to this alone. It is excellent for the table, eaten fresh or cooked, and for jellies or jams without an equal. The vines are enormous bearers. Tip rooted, 10c each; 75c per 10.

## MAMMOTH BLACKBERRY

NAMED BY SOME "THE BLACK LOGANBERRY"

The fruit is enormously large, some specimens measuring from  $2\frac{1}{4}$  to  $2\frac{1}{2}$  inches long; the very largest Blackberry known to the world. The globules are large, seed small, soft and not very abundant; core quite small and very soft. The flavor is a decided improvement on any known variety of Blackberry, the acid flavor so pronounced in all other kinds is very mild and pleasant, and when fully ripe is quite sweet. This berry in size and delicious flavor will eclipse any Blackberry heretofore produced. Strong tip rooted plants, 10c each; 75c per 10.

THE PHENOMENAL BERRY

Is the result of a cross between the Improved California Dewberry and the Cuthbert Raspberry. Mr. Burbank (the introducer) describes it as larger than the largest berry ever before known; bright crimson raspberry color; productive as could be desired. Tip rooted, ready January. 15c each; \$1.25 per 10.

#### **BLACKBERRY**

Himalaya Giant—A late Blackberry, coming after the other berries are gone, ripening over a period of several months, making it especially desirable for family use. In northern California they are seldom injured by frost, as they blossom after all frosts are over. Like the Loganberry, it must be grown on a trellis—the vines under favorable conditions growing 15 to 20 feet. The berries grow in bunches, are of excellent flavor, and the yield surpasses any berry ever introduced. One-year-old plants, 20c each; \$1.50 per 10. Tip rooted plants, 10c each; 75c per 10.

MACATAWA—EVERBEARING BLACKBERRY

The Macatawa, originated by Alfred Mitting in 1909, at Holland, Michigan, is a cross between the true Burbank's Giant Himalaya and the Early Eldorado Blackberry. The Macatawa is a continual fruiter, spring, summer and fall. It is sweet, even in a green state; in fact, it's the sweetest Blackberry grown, and the only true Everbearing Blackberry grown to my knowledge. Its fruit is very large, uniform in size, jet black, oblong, with no core, and very slightly seeded; very solid and will ship 1000 miles. It is a grand canning berry and fine for dessert, jams, jellies, juice and wine. It is an upright self-branching grower and needs no support. Half of its year growth should be pruned back, and all the dead fruiting wood removed. The first year from planting it makes a growth of two feet, the second year four feet, and the canes harden as they mature. It blooms and bears both green and ripe fruit all at same time. The bloom is very large, the size of a silver dollar, and some are semi-double and pure white. The Macatawa should be planted five feet apart in the row, the rows eight feet apart, taking about 1000 plants to the acre. We offer strong plants 20c each; 12 for \$1.50.

#### STRAWBERRIES

Price 25c per dozen; \$1.50 per 100; \$8.00 per 1000.

Brandywine—Plant a luxurious grower, healthy and hardy, and very productive; blossoms perfect; fruit very large, of good form, bright red all over, and of good quality. Season, medium to very late.

Longworth—An old variety, but one of the best.

Molinda-A very good variety; good growers; long lived; good firm berry.

Magoon-Large berry, dark red; fine aroma.

Banner-The best berry.

## RHUBARB

#### AUSTRALIAN CRIMSON WINTER

The great value of Rhubarb as a vegetable has always been in its earliness, and a vast amount of time and labor has been spent in efforts to originate a variety which would produce stalks even a day or two in advance of other early varieties. Australian, "Crimson Winter" Rhubard will produce remarkable stalks abundantly, fully six weeks earlier than any other Rhubarb. Price 25c each; \$2.00 per 10. Smaller plants, 15c each; \$1.00 per 10.

## Sowing Table for the Garden

| Artichoke   | Melon, Water       1 oz. to 30 hills         Melon, Musk       1 oz. to 50 ft. of drill         Okra       1 oz. to 50 ft. of drill         Onion Seed       1 oz. to 100 ft. of drill         Onion, Top Sets       1 lb. to 60 ft. row         Onion, Bottom Sets       1 lb. to 75 ft. row         Parsnip       1 lb. to 100 ft. of drill         Peas " " " " " 1 lb. to 50 ft. of drill         Pepper       1 oz. to 1000 plants         Pumpkin       1 oz. to 50 ft. of drill         Salsify       1 oz. to 50 ft. of drill         Sage       1 oz to 100 ft. of drill         Spinach       1 oz. to 50 ft. of drill         Squash, Early       1 oz. to 50 hills |
|---|--|
| Cucumber       1 oz. to 100 hills         Egg Plant       1 oz. to 2000 plants         Endive       1 oz. to 3000 plants  | Squash, Winter   |
| Kohl Rabi   | Turnip, Early  |
| Seeds Required to Sow One Acre of Ground  |  |
| Lbs. to the Acre. Alfalfa   | Lbs. to the Acre Grass, Red Top  |
| Asparagus   | Grass, Timothy   |
| Barley, broadcast100  | Leek 4   |
| Beans, Dwarf or bush—hills 40   | Lettuce 4  |
| Beans—Dwarf or bush—drills 80   | Millet 40  |
| Beans, Tall or Pole—hills   | Hemp—broadcast40 to 50   |
| Beet, Garden6 to 8  | Melon, Water—hills2 to 3   |
| Beet, Sugar6 to 8   | Melon, Musk—hills2   |
| Beet, Mangel Wurzel6 to 8   | Oats—broadcast   |
| Broom Corn—drills 12  | Onions, for Dry Bulbs—drills4  |
| Buckwheat—broadcast 45  | Okra 5   |
| Cabbage— in beds to cover an acre after   |  |
|   | Onions, for Bottom Sets  |
| transplanting   | Onions, for Bottom Sets  |
| Carrot—drills 3<br>transplanting ¼ to ½   | Onions, for Bottom Sets  |
| Carrot—drills       3         transplanting       ½ to ½         Cauliflower (as Cabbage)       ½ to ½  | Onions, for Bottom Sets       75         Onion Sets       400 to 600         Parsnips—drills       5         Parsley       4         Peas—drills       50 to 60  |
| Carrot—drills       3         transplanting       ½ to ½         Cauliflower (as Cabbage)       ½ to ½         Cucumber—hills       1 to 2         Egyptian Corn       15   | Onions, for Bottom Sets.       75         Onion Sets.       400 to 600         Parsnips—drills       5         Parsley       4         Peas—drills       50 to 60         Peas—broadcast       150         Peanuts       30 to 40  |
| Carrot—drills       3         transplanting       1/4 to 1/2         Cauliflower (as Cabbage)       1/4 to 1/2         Cucumber—hills       1 to 2         Egyptian Corn       15         Egg Plant       1/8   | Onions, for Bottom Sets.       75         Onion Sets.       400 to 600         Parsnips—drills       5         Parsley       4         Peas—drills       50 to 60         Peas—broadcast       150         Peanuts       30 to 40         Potatoes—hills       500 to 600  |
| Carrot—drills       3         transplanting       ¼ to ½         Cauliflower (as Cabbage)       ¼ to ½         Cucumber—hills       1 to 2         Egyptian Corn       15         Egg Plant       ½         Endive       3  | Onions, for Bottom Sets.       75         Onion Sets.       400 to 600         Parsnips—drills       5         Parsley.       4         Peas—drills       50 to 60         Peas—broadcast       150         Peanuts       30 to 40         Potatoes—hills       500 to 600         Pumpkin—hills       3   |
| Carrot—drills       3         transplanting       1/4 to 1/2         Cauliflower (as Cabbage)       1/4 to 1/2         Cucumber—hills       1 to 2         Egyptian Corn       15         Egg Plant       1/8   | Onions, for Bottom Sets.       75         Onion Sets.       400 to 600         Parsnips—drills       5         Parsley       4         Peas—drills       50 to 60         Peas—broadcast       150         Peanuts       30 to 40         Potatoes—hills       500 to 600  |
| Carrot—drills       3         transplanting       ¼ to ½         Cauliflower (as Cabbage)       ¼ to ½         Cucumber—hills       1 to 2         Egyptian Corn       15         Egg Plant       ½         Endive       3         Flax (when wanted for seed)       30         Flax (when wanted for fibre)       50         Grass, Bermuda       10   | Onions, for Bottom Sets.       75         Onion Sets.       400 to 600         Parsnips—drills       5         Parsley       4         Peas—drills       50 to 60         Peanuts       30 to 40         Potatoes—hills       500 to 600         Pumpkin—hills       3         Radish—drills       12         Rye—broadcast       100         Salsify       10   |
| Carrot—drills       3         transplanting       ½ to ½         Cauliflower (as Cabbage)       ½ to ½         Cucumber—hills       1 to 2         Egyptian Corn       15         Egg Plant       ½         Endive       3         Flax (when wanted for seed)       30         Flax (when wanted for fibre)       50         Grass, Bermuda       10         Grass, Kentucky Blue (pasture)       50 | Onions, for Bottom Sets       75         Onion Sets       400 to 600         Parsnips—drills       5         Parsley       4         Peas—drills       50 to 60         Peanuts       30 to 40         Potatoes—hills       500 to 600         Pumpkin—hills       3         Radish—drills       12         Rye—broadcast       100         Salsify       10         Spinach—drills       12   |
| Carrot—drills       3         transplanting       ¼ to ½         Cauliflower (as Cabbage)       ¼ to ½         Cucumber—hills       1 to 2         Egyptian Corn       15         Egg Plant       ½         Endive       3         Flax (when wanted for seed)       30         Flax (when wanted for fibre)       50         Grass, Bermuda       10   | Onions, for Bottom Sets.       75         Onion Sets.       400 to 600         Parsnips—drills       5         Parsley       4         Peas—drills       50 to 60         Peanuts       30 to 40         Potatoes—hills       500 to 600         Pumpkin—hills       3         Radish—drills       12         Rye—broadcast       100         Salsify       10   |
| Carrot—drills 3 transplanting 1½ to ½ Cauliflower (as Cabbage) ½ to ½ Cucumber—hills 1 to 2 Egyptian Corn 15 Egg Plant ½ Endive 3 Flax (when wanted for seed) 30 Flax (when wanted for fibre) 50 Grass, Bermuda 10 Grass, Kentucky Blue (pasture) 50 Grass, Kentucky Blue (for lawn) 250 Grass, Perennial or Australia Rye (for meadow) 40  | Onions, for Bottom Sets  |
| Carrot—drills 3 transplanting 1½ to ½ Cauliflower (as Cabbage) ½ to ½ Cucumber—hills 1 to 2 Egyptian Corn 15 Egg Plant ½ Endive 3 Flax (when wanted for seed) 30 Flax (when wanted for fibre) 50 Grass, Bermuda 10 Grass, Kentucky Blue (pasture) 50 Grass, Kentucky Blue (for lawn) 250 Grass, Perennial or Australia Rye (for meadow) 40 Grass, Perennial or Australian Rye (for                    | Onions, for Bottom Sets  |
| Carrot—drills 3 transplanting 1½ to ½ Cauliflower (as Cabbage) ½ to ½ Cucumber—hills 1 to 2 Egyptian Corn 15 Egg Plant ½ Endive 3 Flax (when wanted for seed) 30 Flax (when wanted for fibre) 50 Grass, Bermuda 10 Grass, Kentucky Blue (pasture) 50 Grass, Kentucky Blue (for lawn) 250 Grass, Perennial or Australia Rye (for meadow) 40  | Onions, for Bottom Sets  |

# CARCO Vegetable Spray

Kills Maggots Infesting
Cabbage, Onions, Turnips, Cauliflower
Beets, Radishes, Etc.

For many years the gardeners of the Pacific Coast have suffered from a scourge of root maggots and worms that has made gardening, if not impossible, much more unprofitable than it should have been. Many remedies have been tried with little success until the "Carco" formula was discovered.

Mr. Henry Huff, horticultural inspector, reports that in every instance where the spray has been used the vegetables have been free from maggots and worms, and, owing to certain fertilizing qualities of the spray, are superior in size and quality to vegetables that have not been sprayed. He has reported this in effect to the local press in his annual report to the State Horticulturist.

The State College of Washington Agricultural Experiment Station at Pullman, Wash., in Monthly Bulletin, Vol. 2, No. 12, for March, 1915 (Western Washington Experiment Station, Puyallup), treats interestingly on spraying and reports tests made with "Carco," which is first in the list of root maggot experiments.

The root maggot is hatched from an egg deposited on the plants by the maggot fly. This fly dislikes the odor of the spray and will not deposit the eggs where this odor is present. To get the best results the ground should be sprayed freely before planting; then again as soon as the vegetable comes up and before the maggot fly makes its appearance. The spray will kill maggots, grubs and caterpillars by contact when freely used. It is better to spray early and often enough to prevent the deposit of eggs than to wait and kill the worms.

Ordinarily an application every three or four weeks should be sufficient to keep vegetables entirely free from pests.

The spray is easily applied. Simply add the necessary water and stir up. It emulsifies freely and will not settle. Apply with an ordinary hand sprinkler, as this is much better than an atomizer or pump spray.

We Guarantee our CARCO SPRAY to do as advertised or money refunded.